

SEISENSE JOURNAL OF MANAGEMENT



Volume 03, Issue 06

ISSN: 2617 - 5770 (ONLINE)



Promoting Behavioral Support for Change: A Conservation of Resources Theory Perspective

Farhan Mehboob^{*1}, Noraini Othman²

^{1,2} School of Business Management, Universiti Utara Malaysia, Malaysia

* Corresponding author: farhan.mehboob9@gmail.com

Article History

Received 2020-08-29

Revised 2020-09-06

Accepted 2020-09-23

Published 2020-10-01

Keywords

Organizational Change

Perceived Management Support

Change-efficacy

Behavioral Support for Change

How to cite?

Mehboob, F., & Othman, N. (2020).
*Promoting Behavioral Support for Change:
A Conservation of Resources Theory
Perspective* SEISENSE Journal of
Management, 3(6), 1-13. doi:
10.33215/sjom.v3i6.448

Copyright © 2020 The Author(s)



Purpose- Individuals' support for change is a critical success factor to implement change effectively. Therefore, identifying the possible antecedent and mechanism, leading to behavioral support towards change, is necessary. The study aims to unfold this avenue of research empirically by examining the role of both person and context factors in promoting behavioral support for change.

Design/Methodology- Data was collected from 292 academic staff of six public sector universities located in Pakistan via cross-sectional mean. A self-reported questionnaire was used to collect responses from the desired population.

Findings- Results revealed a positive impact of perceived management support on academic staff's behavioral support for change. Moreover, change-efficacy also provides a statistically significant intervening mechanism to translate the effect of perceived management support on both dimensions of behavioral support to change such as compliance and championing behavior.

Practical Implications- The research offers useful insights for top university officials to build support for change by providing needed support and resources; make academic staff capable of executing the change-related tasks into viable actions meritoriously.

Introduction

Ongoing and continuous change has substantially reshaped the nature and scope of tasks and organizations (Cascio & Aguinis, 2008). Breakthrough in the areas of information and technology has challenged the survival and existence of many of the organizations across the globe (Tomprou, Nikolaou, & Vakola, 2012). The globalization and competitive pressure; rapidly evolving choices for communities, societies, and customers; and the growing complexity in social and technical ties have been identified as one of those potential factors that have been pushing organizations to continually adapt themselves to the changing dynamics (Schreyögg & Sydow, 2010). Thereby, for organizations to survive and flourish, they have to enhance their resilience toward these socio-economic fluctuations (Burke, 2002). Consequently, organizations have to take frequent initiatives to bring about change in important organizational constituents (Amis & Aïssaoui, 2013). The nature and scope of this change could be diverse and constituted of multiphase interventions such as downsizing (Day, Armenakis, Feild, & Norris, 2012), mergers (Kavanagh & Ashkanasy, 2006), restructuring, and strategic change (Wanberg & Banas, 2000), to quality improvement initiatives (Coyle-Shapiro, 1999). This diversity in change makes it difficult to interpret its ultimate outcomes (Stouten, Rousseau, & De Cremer, 2018) and hence mainly rely on subjective assessment and evaluation (Hiatt, 2006).

In response to the novel ways of doing businesses and providing services through structural and process transformations; employees' response towards these change initiatives has been becoming increasingly critical to sustain and make change more of a successful venture ((Bouckennooghe, M. Schwarz, & Minbashian, 2015; Oreg, Bartunek, Lee, & Do, 2018; Oreg, Vakola, & Armenakis, 2011; van den Heuvel, Demerouti, & Bakker, 2014). There is a consensus prevailing all over the change management literature and practices that employees' positive reaction and support is key to the success of organizational change (Bakari, Hunjra, & Niazi, 2017; Shin, Taylor, & Seo, 2012; Zhao, Seibert, Taylor, Lee, & Lam, 2016). For instance, past studies have indicated that one of the major causes of massive failure rates of about every two-third of the change initiatives has been due to employees lack support toward change (Cinite, Duxbury, & Higgins, 2009; Jansson, 2013; Michel, Todnem, & Burnes, 2013).

Given the role of individuals' support as a critical success factor to bring about change, identifying ways to enact such change support related response has been posing a severe challenge. About address the subsequent issue, the current study examines the potential intervening mechanism through which the change supportive behavioral response likely to be manifested and lead organizations toward better adaptation to the change. The study, in particular, aims to uncover the role of context and personal factors in facilitating one's behavioral support to change. To capture the innate complexities of organizational change and its implications, consideration of both personal and contextual factors is essential to capture the essence of organizational change and its practical implementation to the context. Although past literature on organizational change has elicited both personal and contextual factors as fundamental to successfully bring about change (Fugate & Soenen, 2018; Oreg et al., 2018, 2011), however, rarely have been explored yet about their simultaneous examination in the same study (Fugate & Soenen, 2018).

To assist in advancing the suggestions, the current study addresses this limitation by focusing on the corresponding factors and their underlying relationship pattern in response to the organizational change. Specifically, the study sought to examine the intervening role of self-efficacy (person factor) in the relationship between the perceived management support (context factor) and individuals' behavioral support for change (support factor). The study argues that perceived management support to behavioral support for change relationship would be mediated and effectively translated when the individuals found high at their efficacy level. In brief, perceived management support likely to induce the efficacy level among individuals, which may lead to subsequent change-oriented support behaviors.

Literature Review

Impact of Perceived Management Support on Behavioral Support for Change

Prior research on organizational change opined that individuals' perception and beliefs towards change result in behaviors that are persistent, effortful, and focused in their attempts to support and facilitate the effective implementation of the change initiatives (Haffar, Al-Karaghoul, Irani, Djebarni, & Gbadamosi, 2019; Iqbal & Asrar-ul-Haq, 2018; Oreg et al., 2018, 2011; Rafferty, Jimmieson, & Armenakis, 2013). Taken account of the behavioral perspective to change, Herscovitch and Meyer (2002) distinguished these behavioral manifestations about their level of activation and support towards change either via passive or active orientation, namely compliance and championing behavior. According to them, the minimally acceptable level of support that can be carried out during the change is 'compliance' with the statutory instructions, rules, and directions because of the change under consideration. It is "demonstrating minimum support for a change by going along with the change, but doing so reluctantly" (p. 478). Compliance "occurs when the target person carries out the requested action but is apathetic about it rather than enthusiastic, makes only a minimal or average effort, and does not show any initiative" (Falbe & Yukl, 1992, p. 639). Championing behavior, on the other hand, involves "demonstrating extreme enthusiasm for a change by going above and beyond what is formally required to ensure the success of the change and promoting the change to others" (p. 478). Championing "occurs when a target person agrees internally with an action or decision, is enthusiastic about it, and is likely to exercise initiative and demonstrate unusual effort and persistence to carry out the request successfully" (Falbe & Yukl, 1992, p. 640). Discretionary efforts, therefore, are essentially practical and conceptual means of distinguishing between employee compliance and championing behavior. Accordingly, identifying relative antecedent and their relationship with these forms of support behaviors is valuable for researchers and practitioners. The subsequent significance of behavioral support for change combined with paucity of empirical research examining the bi-folded perspectives to support behaviors provide a core impetus to conduct this study.

Referring to the importance of contextual factors to successfully teach the support for change, the study aims to examine the role of perceived management support as a potential contextual antecedent to induce a positive stimulus among individuals towards change. It has generally been viewed as an essential context attribute in successfully implementing organizational change (Armenakis & Bedeian, 1999; Neves, 2009). Perceive management support refers to providing support from organizational leaders, including formal and informal leaders (Armenakis & Fredenberger, 1997), opinion leaders, or change agents (Armenakis, Bernerth, Pitts, & Walker, 2007). Jimmieson, Terry and Callan, (2004) argued that "one of the managerial challenges facing organizations is the effective implementation of organizational change programs that minimize feelings of uncertainty and associated threat" (p. 11). This highlights how top management is primarily responsible for influencing employee perceptions, expectations, appraisals, and behavioral reactions to implement change (Rafferty & Restubog, 2017) successfully. Rafferty and colleagues (2013) coincide with 'internal context enablers,' which often elicits change management processes that foster individuals' vertical coordination with the higher-ups and stimulate positive work behaviors. Vakola (2014) argued that employees who perceive their managers are supportive, inspiring and trustworthy and openly communicate the change are more likely to develop a positive image regarding the change that ultimately lead employees to demonstrate their support toward change.

A review of past research reveals that perceived management support serves as a central function in enacting employee acceptance to change. For instance, while examining the role of supportive leadership as a predictor of employee commitment to change, Sharma et al. (2018) found a strong positive association between each other. Likewise, Rafferty and Minbashian (2019), in a recent study, observed that perceived management support significantly leads to employees' change supportive behaviors. A study by Bakari et al. (2017) also indicated perceived management support as an antecedent to one's commitment to change. In brief, when

employees report that their leaders and superiors provide adequate support necessary to implement change, their perceived extent of available opportunities to engage in supportive behaviors enhances thus resulting in more supportive behavior about the corresponding organizational change. Because of the theoretical rationale and empirical pieces of evidence, the study thereby hypothesizing that perceived management support is related to both compliance and championing dimensions of individuals' support toward change.

H1a: Perceived management support is positively related to compliance behavior

H1b: Perceived management support is positively related to championing behavior

Mediating Role of Change-related Self-Efficacy in the Relationship between Perceived Management Support and Dimensions of Behavioral Support for Change

Drawing on social cognitive theory, self-efficacy is the core in determining whether an individual can successfully translate the reality in ways he or she intends to (Ng & Lucianetti, 2016). Self-efficacy comprises confidence in one's own capacity to coordinate and execute the course of actions required to manage the prospective circumstances (Bandura, 1995). It represents one's perceived conviction, competence, and optimistic assessment that he or she can successfully execute the action required to reach the desired end (Hughes, Galbraith, & White, 2011). Holt, Armenakis, Feild, & Harris (2007) defined efficacy belief as to the "extent to which one feels that he or she has or does not have the skills and is or is not able to execute the tasks and activities that are associated with the implementation of the prospective change" (p. 238). According to them, individuals high in efficacy belief found themselves more capable of performing the tasks successfully once the change is being made.

Keeping in view, past research noted that one's self-efficacy is mainly instrumental for their ability to accomplish their job requirement in the presence of adverse or demanding situations such as during the organizational change (e.g., Bakari et al., 2017; Rafferty & Minbashian, 2019). This is in line with the principles of conservations of resources theory (COR), whereby it argues that individuals' extent of self-efficacy reflects a critical personal resource that fosters their work engagement in performance-enhancement activities (Hobfoll, 2001; Tims, Bakker, & Derks, 2014). The COR theory postulates that individuals are motivated to protect or enhance their value the most (Hobfoll, 1989). The individuals with more resources are generally more capable of protecting or enhancing their valuable resources by investing more into those resources; whereas those who possess fewer resources are more vulnerable to the loss of such resources (Hobfoll, Halbesleben, Neveu, & Westman, 2018; Strauss & Parker, 2018). The likelihood that employees can generate or accumulate additional resources not only depends on the resources embedded in their working context, such as perceived management support (Zhou, Martinez, Ferreira, & Rodrigues, 2016) but also on their characteristics such as self-efficacy. In this regard, organizations can benefit immensely by leveraging employees' perceptions towards management support and self-efficacy resource to neutralize the resource loss or depleting effect of organizational change. In particular, COR theorizes that possession of such resources generates a motivating effect because these resources help in to spur the generation or accumulation of additional resources (De Clercq & Belausteguigoitia, 2017; Hobfoll, 1989) and contribute positively to achieve job-related goals (Alessandri, Borgogni, & Truxillo, 2015; Miraglia, Alessandri, & Borgogni, 2015).

According to the COR theory, these resources, such as perceived management support and self-efficacy, have an essential role in organizational change, considering change is a stressful and demanding process for individuals (Herscovitch & Meyer, 2002; Huy, 1999). As a result, they need more resources than usual to cope with this demand and develop a positive reaction towards change initiatives (Shin et al., 2012). Moreover, resources employee receives from the top management during organizational change; help them to prepare themselves to cope with the subsequent job demands and shows their needed support about the organizational

change (Bayraktar, 2019). It suggests that management can provide a valuable resource in terms of support that may further enhance employees' belief regarding their self-efficacy to implement the change successfully.

Consistent with the rationale highlighting the significance of self-efficacy in contributing to the employees' accomplishment of performance objectives, prior studies have also supported the role of efficacy in bringing about organizational change (e.g., Amiot, Terry, Jimmieson, & Callan, 2006; Jimmieson et al., 2004). Moreover, recent research has also found a positive role of efficacy in determining the change-related outcomes (Bakari et al., 2017; Haffar, Al-Karaghoul, & Ghoneim, 2014; Haffar et al., 2019; Rafferty & Minbashian, 2019). However, the role of change -efficacy as a potential mediating mechanism to translate the direct impact of perceived management support on change supportive behavior has been least attended in past literature. The study thereby hypothesized change-efficacy as a mediator in the relationship between perceived management support and individuals' behavioral support for change.

H2a: Change-efficacy positively mediates the relationship between perceived management support and compliance behavior

H2b: Change-efficacy positively mediates the relationship between perceived management support and championing behavior

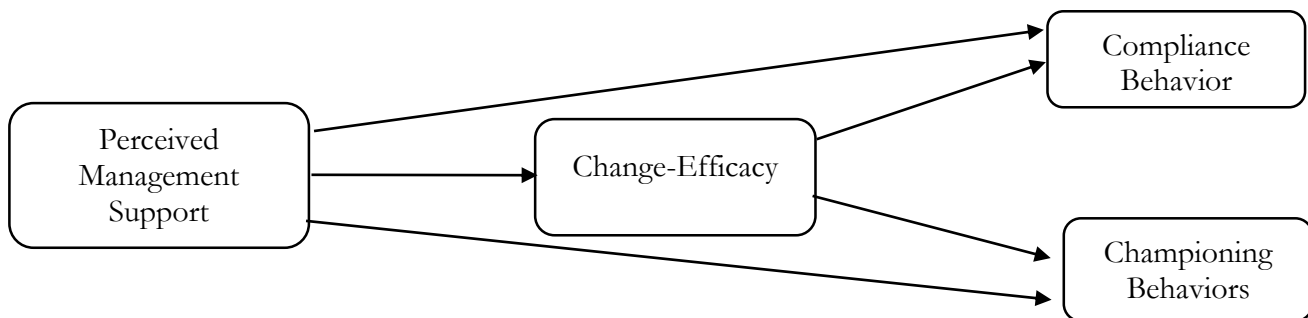


Figure 1 - Research Model

Methods and Data Analysis

The academic staff of six public sector universities located in two provinces (i.e., Punjab and Sindh) of Pakistan, where the population of this study from whom the data was drawn. The universities have been going through the quality enhancement initiatives undertaken by the higher education commission of Pakistan, such as implementing performance appraisal, tenure track status (TTS), research, and promotion policies. The data were randomly drawn from the pooled respondents of selected universities via a proportionate stratified random sampling technique. The sampling frame was generated based on the total number of academic staff in a representative university and its relative proportion in the study. Using Krejcie & Morgan's (1970) sample determination criteria, the study distributed 545 questionnaires to targeted participants and retrieved 308 questionnaires in response, thus accounted for 57% of the response rate. After screening the data for multivariate outliers, 292 responses were found usable for data analysis. The 292 responses consider as sufficient to run data for multivariate analysis and estimations. It adequately satisfies the minimal responses threshold to carry out statistical analysis, as suggested by past scholars (Hair, Black, Babin & Anderson, 2019; Kline, 2011). In corresponding responses, male participants constitute 73% of the sample. The participants with the age group 36 to 45 years relatively represent a larger proportion of 31% than the rest. Likewise, 24% of the participants were of having experience ranging from 16 to 20 years. Around 55% of them were Lecturers, and 49% possesses a Master's degree.

Measures

Behavioral support for change was measured using nine items scale comprises of compliance (3) and championing behavior (6) developed by (Herscovitch & Meyer, 2002). The scale was revised with few amendments wherein ‘organization’ was replaced with ‘university’ while ‘change’ was labeled a quality enhancement initiative by the university.’ The sample item includes, “I speak positively about the quality enhancement initiative introduced by the university to colleagues.” On the other hand, perceived management support was measured using a six items scale conceptualized by (Holt et al., 2007). The sample item includes, “Our senior leaders have encouraged all of us to embrace the quality enhancement initiative introduced by the university.” Change-efficacy was measured using six items scale developed by (Holt et al., 2007). The sample item includes “I have the skills that are needed to make this change work.” All four constructs were measured on a five-point Likert scale ranging from 1 = Strongly disagree to 5 = Strongly agree.

Results

Confirmatory factor analysis was carried out using AMOS 23 to assess the goodness of fit of the measurement model. For this purpose, we used three model fit indices (i.e., Comparative fit index, CFI; Goodness of fit Index GFI; Tucker-Lewis index, TLI; & Root Mean Square Error of Approximation, RMSEA) to evaluate the validity of the proposed model. According to Hair et al. (2019), the fit values ≥ 0.95 for CFI, GFI, and TLI, whereas less than 0.05 show a good fit model. Keeping in view, we compared and tested four alternative models (as determined by Bentler and Bonett, 1980), whereby the hypothesized model showed a better fit relative to the competing models (CFI = 0.97; GFI = 0.94; TLI = 0.96; RMSEA = 0.03; $p < 0.000$), which indicates that the study’s research model has better aligned with the retrieved dataset (see Table 1). Moreover, the factor analysis results also showing the adequate validity of the working constructs as each item was loaded on its own measure (See Appendix for details).

Table 1: Model Fit indices

Model Summary	CMIN/Df	CFI	GFI	TLI	RMSEA
Model 1 ^a (One-factor solution) ^a	4.73	0.63	0.71	0.59	0.13
Model 2 ^b (Two-factor solution) ^b	3.84	0.73	0.74	0.70	0.10
Model 3 ^c (Three-factor solution) ^c	2.67	0.84	0.82	0.82	0.08
Model 4 ^d Original (Four-factor solution) ^d	1.21	0.97	0.94	0.96	0.03

a. One factor solution = all items loaded on Compliance Behavior

b. Two-factor solution = items loaded on Compliance Behavior and Perceived Management Support

c. Three-factor solution = items loaded on Compliance Behavior, Change-Efficacy, and Perceived Management Support

d. Four-factor solution = items loaded on Compliance Behavior, Change-Efficacy, Perceived Management Support, and Championing Behavior

Table 2 summarizes descriptive statistics, including zero-order correlation and reliability analysis of the functional constructs. The mean values of all factors were found above their relative midpoint ranging from $M = 3.39$ to $M = 3.60$, thus indicated that the academic staff was generally in agreement with the statements inquired during the data collection. Moreover, the reliability analysis that has been assessed using Cronbach’s alpha values also falls above the threshold level of 0.70 (as suggested by (Nunnally, 1978), ranging from 0.78 to 0.83, thereby showing the scales used to measure the constructs are reliable. Also, all inter-construct correlations were found significant and pointed in the hypothesized direction. Specifically, the relationship between change-efficacy and compliance behavior was stronger ($r = 0.45$) than the rest.

Table 2: Descriptive and Reliability Statistics

		Mean	SD	1	2	3
1	PMS	3.41	0.73	(0.81)		
2	CEF	3.49	0.76	0.32*(0.78)		
3	COMP	3.60	1.02	0.36*	0.45*(0.82)	
4	CHAMP	3.39	0.80	0.37*	0.40*	0.37*(0.83)

*P < 0.05

Values in parenthesis are Cronbach's alpha for reliability assessment

PMS: Perceived Management Support, CEF: Change-efficacy, COMP: Compliance Behavior, CHAMP: Championing Behavior

Structural regression analysis (SRA) was used to test our hypotheses H1a, H1b. The hypotheses H1a and H1b concern with the positive effect of perceived management support on dimensions of behavioral support for change such as compliance and championing behavior. The result indicated that perceived management support has a significant impact on both compliance (COMP <--- PMS: $\beta = 0.342$; $SE = 0.075$; $p < .01$) as well as championing behavior (CHAMP <--- PMS: $\beta = 0.286$; $SE = 0.059$; $p < .01$) as shown in Table 3 and Figure 1. Thereby the result provided support for the corresponding hypothetical association.

Table 3: Structural Regression Analysis Results

			Estimate	S.E.	C.R.	P
CEF	<---	PMS	.322	.057	5.662	***
COMP	<---	PMS	.342	.075	4.592	***
CHAMP	<---	PMS	.286	.059	4.828	***
COMP	<---	CEF	.516	.073	7.067	***
CHAMP	<---	CEF	.348	.058	6.002	***

***p < .01

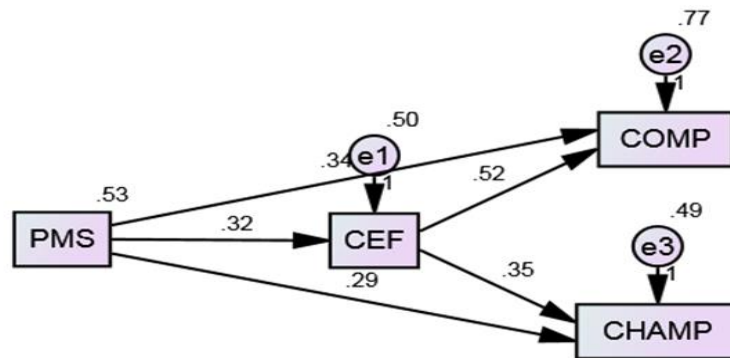


Figure 2 – Path Model

Moreover, the H2a and H2b were poised to examine the mediating role of change-efficacy in translating the impact of perceived management support to the dimensions of behavioral support for change. As predicted, the result showed that the impact of perceived management support on compliance (COMP <--- CEF <--- PMS: $\beta = 0.17$; $SE = 0.06$; $LLCI = 0.09$; $ULCI = 0.25$) and championing behavior (CHAMP <--- CEF <--- PMS: $\beta = 0.11$; $SE = 0.03$; $LLCI = 0.06$; $ULCI = 0.17$) have indirectly been influenced by the presence of change-efficacy. Thus, providing support to both of our hypotheses (see Table 4).

Discussion and Conclusion

The key objective of this study was to examine perceived management support during the time of organizational change to bring about one's behavioral support for change. It also aimed to identify the potential mechanism through which this association effectively transformed into behavioral support for change. The proposed framework was established and applied using the conservation of resources theory to explain the phenomenon under observation. The finding supported our hypotheses H1a and H1b associated with a direct link of perceived management support and behavioral support for change. The results found parallel to the past studies whereby perceived management support found positively related to one's change-oriented outcomes (i.e. (Bakari et al., 2017; Haffar et al., 2019; Rafferty & Minbashian, 2019).

Table 4: Mediation Analysis Results

	Estimates	SE	Compliance	
			BC 95% CI	
			Lower	Upper
Total effect of PMS on COMP	0.51	0.08	0.35	0.66
Direct Effect of PMS on COMP	0.34	0.06	0.20	0.49
Indirect Effect of PMS on COMP via CEF	0.17	0.06	0.09	0.25
Championing				
Total effect of PMS on CHAMP	0.40	0.07	0.28	0.51
Direct Effect of PMS on CHAMP	0.29	0.06	0.17	0.40
Indirect Effect of PMS on CHAMP via CEF	0.11	0.03	0.06	0.17

Note. BC = bias corrected (5,000 bootstrapping samples); CI = confidence interval

Furthermore, the mediation results supported the already reported role of change-efficacy to spur change-oriented support behaviors. It has demonstrated that change-efficacy could also be an effective mechanism to facilitate the change of supportive behavior. Bayraktar and Jiménez (2020), in a recent study, also found change-efficacy as instrumental and lead to change-related outcomes such as commitment to change and intention to support change. It is also a significant determinant of change supportive behavior in a study conducted by (Shin et al., 2012). Moreover, the result also confirms self-efficacy as a critical resource, particularly in a demanding context such as during organizational change. It delineates; when individuals perceive that their top management provides ample support in response to future change, it likely makes them feel confident that they can accomplish the objectives set to implement change effectively. Which ultimately leads them to manifest either compliance or even go beyond to engage in championing behavior as revealed in this study. The findings thus are in line with the tenet of conservation of resources theory (COR), which suggests that resources, mainly self-efficacy serve as instrumental in the face of organizational change (Bayraktar & Jimenez, 2019; Bayraktar & Jiménez, 2020).

In brief, the study confirms the role of perceived management support as a context factor and a resource to stimulate change in supportive behaviors. It also provides support for change-efficacy as a personal resource to lead the change processes. The study thereby confirms that both context and person factors are empirically an excellent choice to incorporate to develop practical support for change mechanism as suggested by scholars (i.e. (Fugate & Soenen, 2018; Oreg et al., 2011; Rafferty et al., 2013). The study thereby contributes to the literature on organizational change in two ways. First, it has responded to the call by past researchers (Fugate & Soenen, 2018; Oreg et al., 2011; Rafferty et al., 2013) to examine both person and context factors to unveil the likely circumstances that promote or inhibit the supportive change orientation by the individuals. The study, in response, examined both aspects and provided empirical support to the subsequent call. Second, though past studies have demonstrated the impact of perceived management support and change-efficacy on one's

commitment and support to change (Bakari et al., 2017; Rafferty & Minbashian, 2019), however, examining change-efficacy as an intervening mechanism align with the conservation of resources theory (COR) perspective, particularly the active-passive behavioral activation (i.e., compliance and championing) towards change has been overlooked. Hence, this study sheds light on this view and empirically drawn support in this regard.

Moreover, the findings also revealed that academic staff was more involved in compliance-oriented behavior, which is categorized as a passive mode of support behavior, than championing behavior that has been tagged as an active form of behavior (see Kim, Hornung, & Rousseau, 2011). The hypothetical associations even found stronger about compliance behavior than championing behavior. It suggests that the academic staff is more prone to comply with the subsequent change initiatives at the minimum acceptable level than act as champions to advocate change. The study, therefore, unfolds that employees' desirable response to change initiative could be promoted if the extent of support from top management and their level of efficacy regarding change increases. Conclusively the study provides scholars and practitioners a theoretical and empirical rationale for the underlying relationships and mechanism to develop the support for change, particularly under the university settings.

Limitations and Future Research

Despite the empirical contributions of the study, the findings of the study should be understood with certain limitations. First, the findings are based on the cross-sectional research design and single-source data that restrain our claim of causal relationships reported in this study. Although the framework was developed with extant literature review anchored with theoretical underpinning and results also provided support and confirmation of the propositions. However, more research has been needed, mainly via longitudinal or dyadic design, to validate the study findings. Second, the findings of the study are only subject to the academic staff of public sector universities. Therefore, further research is needed across cultures, sectors, and functional areas to confirm the generalizability of the model.

Funding: This research received no external funding.

Conflicts of Interest: The authors declare no conflict of interest.

References

- Alessandri, G., Borgogni, L., & Truxillo, D. M. (2015). Tracking job performance trajectories over time: A six-year longitudinal study. *European Journal of Work and Organizational Psychology*, 24(4), 560–577.
- Amiot, C. E., Terry, D. J., Jimmieson, N. L., & Callan, V. J. (2006). A longitudinal investigation of coping processes during a merger: Implications for job satisfaction and organizational identification. *Journal of Management*, 32(4), 552–574.
- Amis, J. M., & Aïssaoui, R. (2013). Readiness for change: An institutional perspective. *Journal of Change Management*, 13(1), 69–95.
- Armenakis, A. A., & Bedeian, A. G. (1999). Organizational change: A review of theory and research in the 1990s. *Journal of Management*, 25(3), 293–315.
- Armenakis, A. A., Bernerth, J. B., Pitts, J. P., & Walker, H. J. (2007). Organizational change recipients' beliefs scale: Development of an assessment instrument. *The Journal of Applied Behavioral Science*, 43(4), 481–505.
- Armenakis, A. A., & Fredenberger, W. B. (1997). Organizational change readiness practices of business turnaround change agents. *Knowledge and Process Management*, 4(3), 143–152.

- Bakari, H., Hunjra, A. I., & Niazi, G. S. K. (2017). How does authentic leadership influence planned organizational change? The role of employees' perceptions: Integration of theory of planned behavior and Lewin's three step model. *Journal of Change Management*, 17(2), 155–187.
- Bandura, A. (1995). *Self-efficacy in changing societies*. Cambridge university press.
- Bayraktar, S. (2019). How leaders cultivate support for change: Resource creation through justice and job security. *The Journal of Applied Behavioral Science*, 55(2), 213–234.
- Bayraktar, S., & Jimenez, A. (2019). Impact of Transformational Leadership on Positive Reactions to Change through Self-Efficacy. 2019(1), 12621. Academy of Management Briarcliff Manor, NY 10510.
- Bayraktar, S., & Jiménez, A. (2020). Self-efficacy as a resource: A moderated mediation model of transformational leadership, extent of change and reactions to change. *Journal of Organizational Change Management*.
- Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin*, 88(3), 588.
- Bouckennooghe, D., M. Schwarz, G., & Minbashian, A. (2015). Herscovitch and Meyer's three-component model of commitment to change: Meta-analytic findings. *European Journal of Work and Organizational Psychology*, 24(4), 578–595.
- Burke, R. (2002). Hybrid recommender systems: Survey and experiments. *User Modeling and User-Adapted Interaction*, 12(4), 331–370.
- Cascio, W. F., & Aguinis, H. (2008). Research in industrial and organizational psychology from 1963 to 2007: Changes, choices, and trends. *Journal of Applied Psychology*, 93(5), 1062.
- Cinite, I., Duxbury, L. E., & Higgins, C. (2009). Measurement of perceived organizational readiness for change in the public sector. *British Journal of Management*, 20(2), 265–277.
- Coyle-Shapiro, J. A.-M. (1999). Employee participation and assessment of an organizational change intervention: A three-wave study of total quality management. *The Journal of Applied Behavioral Science*, 35(4), 439–456.
- Day, K. M., Armenakis, A. A., Feild, H. S., & Norris, D. R. (2012). Other organizations are doing it, why shouldn't we? A look at downsizing and organizational identity through an institutional theory lens. *Journal of Change Management*, 12(2), 165–188.
- De Clercq, D., & Belausteguigoitia, I. (2017). Mitigating the negative effect of perceived organizational politics on organizational citizenship behavior: Moderating roles of contextual and personal resources. *Journal of Management & Organization*, 23(5), 689–708.
- Falbe, C. M., & Yukl, G. (1992). Consequences for managers of using single influence tactics and combinations of tactics. *Academy of Management Journal*, 35(3), 638–652.
- Fugate, M., & Soenen, G. (2018). Predictors and processes related to employees' change-related compliance and championing. *Personnel Psychology*, 71(1), 109–132.
- Haffar, M., Al-Karaghoul, W., & Ghoneim, A. (2014). An empirical investigation of the influence of organizational culture on individual readiness for change in Syrian manufacturing organizations. *Journal of Organizational Change Management*.
- Haffar, M., Al-Karaghoul, W., Irani, Z., Djebarni, R., & Gbadamosi, G. (2019). The influence of individual readiness for change dimensions on quality management implementation in Algerian manufacturing organisations. *International Journal of Production Economics*, 207, 247–260.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (1998). *Multivariate data analysis* (Vol. 5). Prentice hall Upper Saddle River, NJ.
- Herscovitch, L., & Meyer, J. P. (2002). Commitment to organizational change: Extension of a three-component model. *Journal of Applied Psychology*, 87(3), 474.
- Hiatt, J. (2006). *ADKAR: a model for change in business, government, and our community*. Prosci.

- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, 44(3), 513.
- Hobfoll, S. E. (2001). The influence of culture, community, and the nested-self in the stress process: Advancing conservation of resources theory. *Applied Psychology*, 50(3), 337–421.
- Hobfoll, S. E., Halbesleben, J., Neveu, J.-P., & Westman, M. (2018). Conservation of resources in the organizational context: The reality of resources and their consequences. *Annual Review of Organizational Psychology and Organizational Behavior*, 5, 103–128.
- Holt, D. T., Armenakis, A. A., Feild, H. S., & Harris, S. G. (2007). Readiness for organizational change: The systematic development of a scale. *The Journal of Applied Behavioral Science*, 43(2), 232–255.
- Hughes, A., Galbraith, D., & White, D. (2011). Perceived competence: A common core for self-efficacy and self-concept? *Journal of Personality Assessment*, 93(3), 278–289.
- Huy, Q. N. (1999). Emotional capability, emotional intelligence, and radical change. *Academy of Management Review*, 24(2), 325–345.
- Iqbal, A., & Asrar-ul-Haq, M. (2018). Establishing relationship between TQM practices and employee performance: The mediating role of change readiness. *International Journal of Production Economics*, 203, 62–68.
- Jansson, N. (2013). Organizational change as practice: A critical analysis. *Journal of Organizational Change Management*, 26(6), 1003–1019.
- Jimmieson, N. L., Terry, D. J., & Callan, V. J. (2004). A longitudinal study of employee adaptation to organizational change: The role of change-related information and change-related self-efficacy. *Journal of Occupational Health Psychology*, 9(1), 11.
- Kavanagh, M. H., & Ashkanasy, N. M. (2006). The impact of leadership and change management strategy on organizational culture and individual acceptance of change during a merger. *British Journal of Management*, 17(S1), S81–S103.
- Kim, T. G., Hornung, S., & Rousseau, D. M. (2011). Change-supportive employee behavior: Antecedents and the moderating role of time. *Journal of Management*, 37(6), 1664–1693.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30(3), 607–610.
- Michel, A., Todnem, R., & Burnes, B. (2013). The limitations of dispositional resistance in relation to organizational change. *Management Decision*, 51(4), 761–780.
- Miraglia, M., Alessandri, G., & Borgogni, L. (2015). Trajectory classes of job performance. *Career Development International*.
- Neves, P. (2009). Readiness for change: Contributions for employee's level of individual change and turnover intentions. *Journal of Change Management*, 9(2), 215–231.
- Ng, T. W., & Lucianetti, L. (2016). Within-individual increases in innovative behavior and creative, persuasion, and change self-efficacy over time: A social–cognitive theory perspective. *Journal of Applied Psychology*, 101(1), 14.
- Nunnally, J. C. (1978). *Psychometric Theory*: 2d Ed. McGraw-Hill.
- Oreg, S., Bartunek, J. M., Lee, G., & Do, B. (2018). An affect-based model of recipients' responses to organizational change events. *Academy of Management Review*, 43(1), 65–86.
- Oreg, S., Vakola, M., & Armenakis, A. (2011). Change recipients' reactions to organizational change: A 60-year review of quantitative studies. *The Journal of Applied Behavioral Science*, 47(4), 461–524.
- Rafferty, A. E., Jimmieson, N. L., & Armenakis, A. A. (2013). Change readiness: A multilevel review. *Journal of Management*, 39(1), 110–135.
- Rafferty, A. E., & Minbashian, A. (2019). Cognitive beliefs and positive emotions about change: Relationships with employee change readiness and change-supportive behaviors. *Human Relations*, 72(10), 1623–1650.

- Rafferty, A. E., & Restubog, S. L. (2017). Why do employees' perceptions of their organization's change history matter? The role of change appraisals. *Human Resource Management*, 56(3), 533–550.
- Schreyögg, G., & Sydow, J. (2010). Crossroads—Organizing for fluidity? Dilemmas of new organizational forms. *Organization Science*, 21(6), 1251–1262.
- Sharma, N., Herrnschmidt, J., Claes, V., Bachnick, S., De Geest, S., Simon, M., & MatchRN-Study Group. (2018). Organizational readiness for implementing change in acute care hospitals: An analysis of a cross-sectional, multicentre study. *Journal of Advanced Nursing*, 74(12), 2798–2808.
- Shin, J., Taylor, M. S., & Seo, M.-G. (2012). Resources for change: The relationships of organizational inducements and psychological resilience to employees' attitudes and behaviors toward organizational change. *Academy of Management Journal*, 55(3), 727–748.
- Stouten, J., Rousseau, D. M., & De Cremer, D. (2018). Successful organizational change: Integrating the management practice and scholarly literatures. *Academy of Management Annals*, 12(2), 752–788.
- Strauss, K., & Parker, S. K. (2018). Intervening to enhance proactivity in organizations: Improving the present or changing the future. *Journal of Management*, 44(3), 1250–1278.
- Tims, M., Bakker, A. B., & Derks, D. (2014). Daily job crafting and the self-efficacy–performance relationship. *Journal of Managerial Psychology*.
- Tomprou, M., Nikolaou, I., & Vakola, M. (2012). Experiencing organizational change in Greece: The framework of psychological contract. *The International Journal of Human Resource Management*, 23(2), 385–405.
- Vakola, M. (2014). What's in there for me? Individual readiness to change and the perceived impact of organizational change. *Leadership & Organization Development Journal*.
- van den Heuvel, M., Demerouti, E., & Bakker, A. B. (2014). How psychological resources facilitate adaptation to organizational change. *European Journal of Work and Organizational Psychology*, 23(6), 847–858.
- Wanberg, C. R., & Banas, J. T. (2000). Predictors and outcomes of openness to changes in a reorganizing workplace. *Journal of Applied Psychology*, 85(1), 132.
- Zhao, H. H., Seibert, S. E., Taylor, M. S., Lee, C., & Lam, W. (2016). Not even the past: The joint influence of former leader and new leader during leader succession in the midst of organizational change. *Journal of Applied Psychology*, 101(12), 1730.
- Zhou, Q., Martinez, L. F., Ferreira, A. I., & Rodrigues, P. (2016). Supervisor support, role ambiguity and productivity associated with presenteeism: A longitudinal study. *Journal of Business Research*, 69(9), 3380–3387.

Appendix

Factor Analysis (Principal Component Analysis) of the Study Variables

Table 5: Factor Analysis

KMO and Bartlett's Test				
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.				.885
Bartlett's Test of Sphericity	Approx. Chi-Square			2091.386
	df			210
	Sig.			.000
	Component			
	1	2	3	4
CHAMP_3	.736			
CHAMP_5	.729			
CHAMP_1	.724			
CHAMP_4	.718			
CHAMP_6	.684			
CHAMP_2	.637			
CEF_1		.777		
CEF_4		.719		
CEF_5		.691		
CEF_6		.658		
CEF_3		.637		
CEF_2		.619		
PMS_1			.717	
PMS_2			.701	
PMS_3			.686	
PMS_5			.665	
PMS_4			.658	
PMS_6			.539	
COMP_3				.836
COMP_2				.784
COMP_1				.782
Extraction Method: Principal Component Analysis.				
Rotation Method: Varimax with Kaiser Normalization.				
a. Rotation converged in 5 iterations.				

Empowering Leadership and Employee Creativity: The Mediating Role of Psychological Empowerment

A Nuzul*¹, Andree Witjaksono², Anang Kistyanto³

^{1,2,3} Postgraduate Universitas Negeri Surabaya, Indonesia

* Corresponding author: a.19006@mhs.unesa.ac.id

Article History

Received 2020-09-16

Revised 2020-10-07

Accepted 2020-10-10

Published 2020-10-17

Keywords

Empowering Leadership

Psychological Empowerment

Employee Creativity

How to cite?

Nuzul, A., Witjaksono, A., & Kistyanto, A. (2020). *Empowering Leadership and Employee Creativity: The Mediating Role of Psychological Empowerment*. SEISENSE Journal of Management, 3(6), 14-25. doi: 10.33215/sjom.v3i6.467

Purpose: This paper tried to examine the mediation effect of psychological empowerment between empowering leadership and employee creativity

Design/Methodology: This study referred to quantitative research design and used a paper-based online questionnaire to collect data from a sample of 65 employees drawn from an Information Technology company in Surabaya, Indonesia. This study used the SEM (Structural Equation Modeling) Partial Least Square analysis with saturated samples.

Findings: The results indicate that empowering leadership and psychological empowerment positively and significantly affect employee creativity. The results further reveal that psychological empowerment significantly mediating the relationship between empowering leadership and employee creativity.

Practical Implications: The findings of this study provide benefits for company leaders to identify learning solutions to practical solutions, motivate employees to come up with creative ideas, and empower employees. Mostly during challenging times such as during the COVID 19 pandemic, work must be done from home. The results of this study provide opportunities for leaders to produce techniques, policies, and strategies to increase employee creativity through motivation, direction, and empowerment

Originality/Value: This study makes a new attempt to demonstrate the mediating effect of empowering leadership and employee creativity in Information Technology companies at Vascomm Surabaya Indonesia. In addition, the research underlines the importance of motivating and always giving employees freedom for creative behavior which is important knowledge in difficult times like today caused by the covid-19 pandemic.

Copyright © 2020 The Author(s)



Introduction

The Industrial Era 4.0 was realized by technological developments in various industrial sectors, the ease of information, and the development of the world's business environment that impacted changing strategies owned by every country around the world (Kementerian Keuangan, 2019). This change makes countries feel that they need other capital besides finance to deal with the changes that occur, but that talented and reliable human resources are needed in managing company resources (Sugiarto, 2019). Optimizing human resources in various countries requires competent skill competencies; this is what happened in Indonesia (Arief, 2019). Indonesia is trying to improve various industries by increasing its employees; one of these industries is the Information Technology industry, such as Vascomm. To develop a company to compete with other companies, it is necessary to utilize the potential of existing resources. Therefore, employees try to be equipped with skills. If the employees are skilled and reliable, they will develop their human resources (Mathis, 2002). An organization's performance can be improved in various ways, one of which is through the creativity of its employees (Firmandari, 2014). Creativity is believed to create competitive organizational abilities because creativity is needed by the organization to adapt to environmental changes and gain a competitive advantage in existing opportunities (Shalley et al., 2004).

A leader can do increasing employee creativity. The leadership style for each leader is different, one of which is empowering leadership. Empowering leadership is a capable leadership style increase creativity (Slatten, 2011). Empowering leadership is a leadership style that gives employees the freedom to make decisions independently (Forrester, 2000). Leaders with the Empowering Leadership style will encourage employees to take the initiative at work; the leader also guides employees on how to do an excellent job with the hope of achieving company targets (Amundsen & Martinsen, 2014). This is like what one of Vascomm did, always encouraging employees to take the initiative in their work. Besides that, leaders always direct employees to be professional in their work to achieve target goals with creative employee attitudes. However, there is the difference research about Empowering Leadership on Employee Creativity that Empowering Leadership has an insignificant influence on Employee Creativity (Roellyanti, 2015).

Apart from affecting Employee creativity, Empowering Leadership also has a positive effect on Psychological Empowerment (Zhang & Bartol, 2010). Other studies also explain that Empowering Leadership also has a positive effect on Psychological Empowerment (Al-madadha, 2014). Psychological Empowerment is also able to increase employee creativity (Javed & Arjoon, 2017). Amundsen & Martinsen (2015) explained that psychological empowerment affects job satisfaction and work effort but not with creativity. Self-leadership affects work effort and creativity but not job satisfaction. Besides being able to influence Employee Creativity directly, Psychological Empowerment can be a mediator between Empowering Leadership in Employee Creativity Al-Magadha (2014) and the research from Zhang & Bartol (2010). Based on the research background that has been stated, it can be seen that the objectives of this study are as follows: To test and analyze the effect of empowering leadership on employee creativity in employees of Vascomm Surabaya. To test and analyze the effect of empowering leadership on psychological empowerment on Vascomm Surabaya employees. To test and analyze the effect of psychological empowerment on employee creativity at Vascomm Surabaya employees. To test and analyze the role of psychological empowerment in Empowering Leadership towards Employee Creativity.

Literature Review

This study referred to the Component Theory of Individual Creativity (CTIC) (individual-level phenomenon) (Amabile, 1997). Empowering leadership referred to leadership theory (Liu et al. 2003) leaders target followers to develop their control. Employees are encouraged to participate in decision-making, directed to innovate independently. Company leaders give employees the authority to carry out work by always encouraging

employees to take the initiative. Leaders motivate to build self-confidence in their employees. Empowering leaders are essential to technology innovation companies like Vascomm Surabaya Indonesia. This leadership empowerment will make employees always be given the freedom to think and do something useful so that there is a feeling that someone's job is personally meaningful, and employees are confident in their ability to perform tasks successfully. This leadership empowerment theory is meaningful because it will be able to encourage competence, employee involvement, and employee participation to channel new ideas, especially at Vascomm Surabaya Indonesia, which is always demanded that employees should be creative and solve problems independently.

Empowering Leadership and Employee Creativity

Empowering leadership is developing four leadership typologies, including directive leadership, transactional leadership, transformational leadership, and empowering leadership (Pearce *et al.*, 2003). Empowering leadership is a leadership style that gives employees the freedom to make decisions independently (Forrester, 2000). It is also argued that empowering leadership enables a condition experienced by employees that they feel meaningful about their work, further giving autonomy and expressing confidence in employees' abilities, and removing obstacles in decision-making to improve employee performance (Zhang & Zhou, 2014). Empowering leadership has a fundamental influence on creativity. This leadership style explains that leaders provide motivation and investment to employees (Zhang & Bartol, 2010). The results of other research conducted by Slatten (2011) also support that the use of variables empowering leadership, humorous work climate, creativity, and innovative behavior with the results of empowering leadership and humorous work climate has a strong positive effect on employee creativity. Byun & Kang (2016) 's research has a significant positive effect of empowering leadership for creativity. The study was conducted on 224 prospective employee leaders who work in South Korean companies. In this study, it is explained that in a situation of high task visibility, Empowering leadership prioritizes creativity for employees with low motivation rather than high motivation.

Empowering leadership is a process of influencing subordinates through power-sharing, directing work independently, developing self-control, and innovating to make decisions independently. Empowering leadership was carried out by the leadership of Vascomm Surabaya to their employees by providing office motivation, assignments, giving freedom in the process.

H1: Empowering leadership has a significant positive effect on employee creativity

Empowering Leadership and Psychological Empowerment

Empowering leadership also has a positive effect on Psychological Empowerment (Al-madadha, 2014). While the indicator measurement from Psychological Empowerment is used (Spreitzer, 1995), there are four indicators: meaning, competence, self-determination, and impact. Al-madadha (2014) explained that Empowering Leadership was significantly positive for Psychological Empowerment. all indicators claim to affect empowering leadership. Measuring indicators of Empowering Leadership use Ahearne & Rapp (2005), those are Increasing the meaning of work, Fostering participation in decision making, Expressing confidence in high performance, and providing autonomy from bureaucratic constraints. The conclusions of several expert theoretical opinions are empowering leadership will improve psychological empowerment because leaders will provide direction and authority so that employees will be able to empower their thinking for good performance.

H2: Empowering leadership has a significant positive effect on psychological empowerment

Psychological Empowerment and Employee Creativity

Javed & Arjoon (2017). explained that psychological empowerment increases employee creativity. Psychological Empowerment research indicators use Spreitzer (1995), which indicators are not mentioned in the journal. Meanwhile, Employee Creativity used indicators from George & Zhou (2001). Another supporting research is

Al-madadha (2014) that psychological empowerment has a positive impact on employee creativity. The indicator used is Spreitzer (1995) there are four indicators, namely meaning, competence, self-determination, and impact. The indicator of creativity referred to George & Zhou (2001) with 13 indicator items.

Employee creativity is an attempt to bring out new and original things in innovative ways. Employee creativity in Vascomm is useful for doing other creative endeavors in terms of creating new products.

H3: Psychological Empowerment has a significant positive effect on Employee Creativity

Mediating Role of Psychological Empowerment

Zhang & Bartol (2010) explained that Psychological Empowerment could be a mediating variable. The study revealed the influential mediating role of psychological empowerment on intrinsic motivation variables and creative processes engagement. Another study conducted by Javed & Arjoon (2017) also explained that Psychological Empowerment was able to mediate the relationship between Ethical Leadership in Employee Creativity with a bootstrapped value of 95%. in Ethical Leadership using indicators from Brown et al. (2005), ten items. Psychological Empowerment uses Spreitzer (1995), and Employee Creativity uses 13 item indicators (George & Zhou, 2001). When employees feel useful and believe that they will create the desired results through their actions, they can focus on specific challenges with more certainty. The employee shows more intention to take risks and come up with more unique ideas. Therefore, it is expected to show a higher level of creativity in their work. Psychological empowerment was found to mediate the relationship between ethical leadership and employee creativity. Thus, ethical leaders must enable employees to meet three basic psychological needs related to competence and autonomy. This will promotes psychological empowerment.

Psychological Empowerment is a person's psychological state manifested through meaning, competence, self-determination, and impact in carrying out work for organizational practices in Vascomm.

H4: Psychological Empowerment has a mediating effect on Empowering Leadership and Employee Creativity

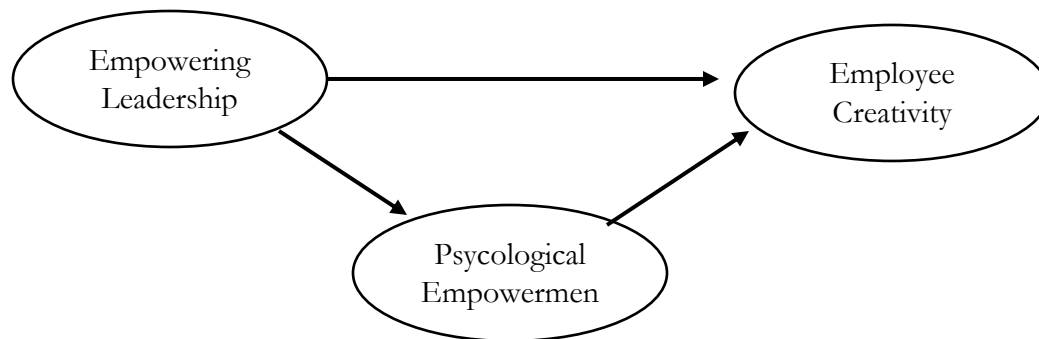


Figure 1 - Conceptual Model

Research Methodology

Study Design

This research used quantitative research methods. According to Arikunto (2006), quantitative research includes: objectives, approaches, subjects, samples, dependable data sources, and has been detailed from the beginning, samples are used, and the results of the research apply to the population. The research method describes the type of research, obtaining data, and data analysis are straightforward. Those are the steps and expected research results. The analysis is carried out after all data have been collected. This study examined and analyzed the role

of psychological empowerment as an intervening variable between empowering leadership in employee creativity.

Sample

The study population was 65 employees of Vascomm Surabaya Indonesia, who worked in various positions. The sampling technique used was saturated samples. The research variables include the independent variable, the dependent variable, the mediating variable. The independent variable is empowering leadership. The dependent variable is employee creativity; the mediating variable is psychological empowerment. The questionnaire data used statements from several experts distributed to Vascomm Surabaya Indonesia employees online. Background characteristics related to employee gender, education, age, and experience. Employee gender is measured by the number of male and female respondents are categorized as 1 and 2. Employee age is measured by analyzing three age categories, those 20-25 years, 26-30 years, and those above 30 years. Education level is measured at the senior high school level, diploma level, Bachelor's degree, and postgraduate levels. Furthermore, employee experience is measured by the following experience ranges; less than one year, 2-5 years, and more than five years. Response scores were elicited on a 5-point Likert type scale scored as follows: 1-strongly, disagree; 2-disagree; 3-neutral; 4-agree, 5-strongly agree.

Variable Measurement

Measurement of empowering leadership using (Amundsen & Martinsen, 2014), there is 9 item. Employee creativity uses the measurement from (Farmer et al. 2003): employees always try new ideas and methods; employees can always solve every problem, and employees can produce breakthroughs related to work. While psychological empowerment using Spreitzer (1995), there are eight items.

Data Analysis

The validity test is used to measure whether a questionnaire is valid or not. A questionnaire is valid if the questionnaire questions can reveal something that will be measured by the questionnaire. Simultaneously, the reliability test is a tool to measure a questionnaire that is an indicator of the variable. A questionnaire is reliable or reliable if someone's answer to a statement is consistent or stable over time (Ghozali, 2014). This research also uses descriptive analysis. Descriptive statistics are used to analyze by describing the data that has been collected without intending to make conclusions or generalizations Sugiyono (, 2017). The statistic will be suitable if the sample is taken from an exact population, and the sample taken is done as a whole. The research hypothesis testing was carried out with the Structural Equation Model (SEM) using the partial least square (PLS) analysis method supported by computer software, namely the smart PLS program. Partial Least Square (PLS) is a powerful analysis method because it can be applied to all data scales, does not require many assumptions, and the sample size does not have to be large. Partial least square (PLS) can not only be used as confirmation of the theory. Still, it can also be used to explain whether or not there is a relationship between latent variables (Ghozali, 2014).

Results

Out of the 65 questionnaires given, all of those are back. The study's background characteristics presented in Table 1 revealed the following: Most of the respondents were males (66.2%) female (33.8%). Respondents were mostly of the Bachelor's degree level (70.3%) or diploma level (21.5%). According to age, most respondents ranged from 20 to 25 years old (55.4%). Moreover, 43 had an experience of 2-5 years (66.2%).

Table 1: Demographic Background of the study

		Frequency	Percent
Gender	Male	43	66.2
	Female	22	33.8



	Total	65	100
Education	Junior secondary school level	3	4.6
	diploma level, , and	14	21.5
	Bachelor's degree	46	70.3
	Postgraduate levels	2	3.6
	Total	65	100
Age	20-25 years	36	55.4
	26-30 years	25	38.5
	Above 30 years	4	6.2
	Total	65	100
Experience	Less than 1 year	14	21.5
	2-5 years	43	66.2
	Above 5 years	8	12.3
	Total	65	100

Figure 2 and Table 2 explain that convergent validity can be accepted. Check the size of all latent variable items was found to be a useful parameter. External analysis for each indicator and AVE results have met the requirements. on the other hand, the composite reliability and Cronbach's alpha exceed the recommended cut-

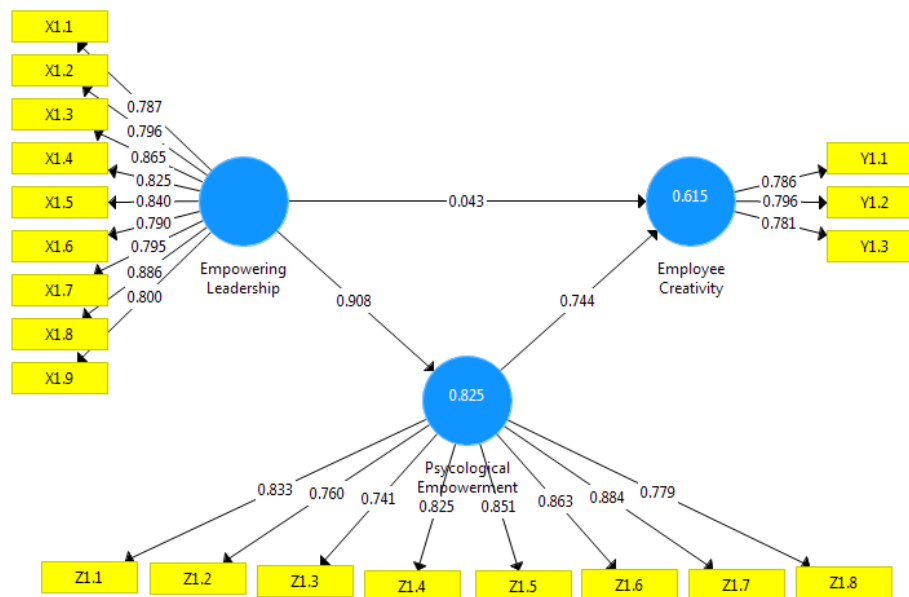


Figure 2 - Measurement model

off values

Table 2: Specified Measurement Model

Latent Variable	Indicator / item	Convergent Validity		Internal Consistency	Reliability
		Outer loadings	AVE		
		>0.70	>0.70	>0.70	
	EL1	0.789	0.674	0.949	Cronbach Alpha 0.939

Empowering Leadership (X1)	EL2	0.796			
	EL3	0.865			
	EL4	0.825			
	EL5	0.840			
	EL6	0.790			
	EL7	0.795			
	EL8	0.886			
	EL9	0.800			
	PSCE1	0.833			
Psychological Empowerment (Z1)	PSCE2	0.760	0.670	0.942	0.929
	PSCE3	0.741			
	PSCE4	0.825			
	PSCE5	0.851			
	PSCE6	0.863			
	PSCE7	0.884			
	PSCE8	0.779			
	EC1	0.786			
Employee Creativity (Y1)	EC2	0.796	0.620	0.830	0.710
	EC3	0.781			

The significance level test shows that the t-statistic for all paths uses the SmartPLS 3.0 bootstrap function. Based on the assessment of the path coefficient as shown in Figure 3, it was found that two direct relationships had a t-statistic value > 1.96, which was significant, and one relationship was not significant because t-statistic value > 1.96.

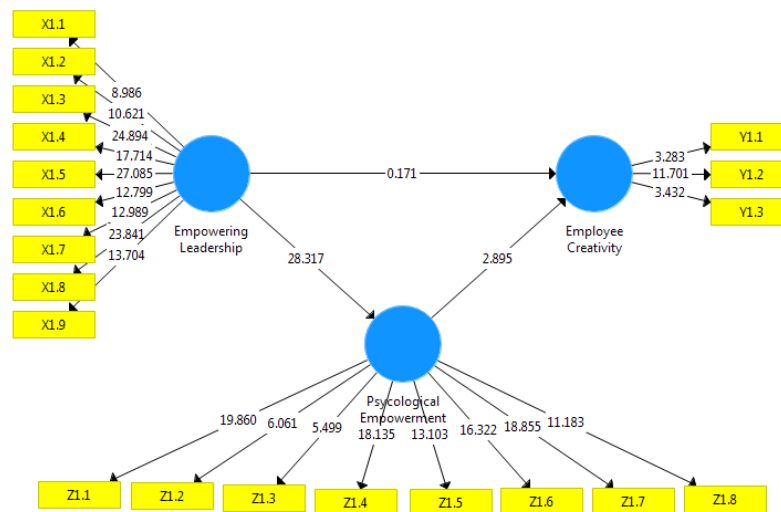


Figure 3 - Measurement Bootstrapping Model

Table 4: Hypothesis Testing for Direct Effect

Relationship	Original Sample	T- Statistics	P-Value	Result
Empowering Leadership and Employee Creativity	0.043	0.159	0.874	H1 Reject



Empowering Leadership and Psychological Empowerment	0.908	29.760	0.000	H2 Accept
Psychological Empowerment and Employee Creativity	0.744	2.727	0.007	H3 Accept

Analysis of hypothesis testing in table 4 for the direct effect shows that empowering leadership does not affect employee creativity. This can be seen from the data, which shows that the t-statistic value is 0.159, which is less than 1.96, so that H1 is rejected. The value of t-statistics on the effect of empowering leadership on Psychological Empowerment is 29.760 > 1.96. This shows that there is a significant influence on the Empowering leadership variable on Psychological Empowerment. At the same time, the coefficient estimate is 0.908. The coefficient has a positive sign, which means that the higher the leadership empowerment, the higher the psychological empowerment, so H2 accepts. The value of t-statistics on the effect of psychological empowerment on employee creativity is 2.727 > 1.96. This shows that there is a significant influence psychological empowerment variable on employee creativity. At the same time, the coefficient estimate is 0.744. The coefficient has a positive sign, which means that the higher the psychological empowerment, the higher employee creativity, so H3 accepts.

Table 5. Hypothesis Testing for Indirect Effect

Relationship	Original Sample	T- Statistics	P-Value	Result
Empowering Leadership, Psychological Empowerment, and Employee Creativity	0.676	2.713	0.007	H4 Accept

Source: Smart PLS 3.0

The Bootstrapping analysis of Table 5 has shown that psychological empowerment's indirect effects are significant with t-statistics of 2.713. Therefore, it is concluded that the mediation effects of indirect effects psychological empowerment are statistically significant.

Discussion

Hypothesis 1, the results reveal that empowering leadership has no significant effect on employee creativity. The interpretation of the results is that even though the leader applies an empowering leadership style, it does not affect their performance. These results contradict previous research (Slatten, 2011; Zhang & Zhou, 2014; Byun *et al.* (2016), which found a positive direct relationship between empowering leadership and employee creativity, **H1 rejected**. The statistical analysis results obtained: $\beta = 0.043$ with t-value 0.159, empowering leadership has no significant effect on employee creativity. At the same time, the estimated coefficient value tends to be positive. However, it does not significantly impact. Based on online interviews with several respondents / online questionnaire participants, this happened because the work process was carried out online, such as meetings, discussions during the Covid-19 Pandemic. Motivation or direction from the leader is often less precise when compared to face to face meeting. Characteristics of respondents based on age also note that the maximum number of employees aged 20-25 years is 36 or (55.4%). At that age, employees are often confused about leadership instructions and the need for a strong emotional connection. Also, it is known that there are other factors besides leadership style that affect employee creativity, one of which is peer support. Colleagues who continue to motivate and share knowledge create a relaxed mind and can think clearly, which will lead to new ideas in the completion of work. Other things can be done to create creativity, including holding informal meetings outside office hours to create intimacy for each individual. This is because employees are

always tense during discussions, so they don't enjoy it. Holding activities outside office hours or holidays will create a relaxed atmosphere and be used as a medium for sharing colleagues.

In hypothesis 2, the results reveal that empowering leadership has a significant positive effect on employee creativity. These results explain that the better the empowering leadership style, the employee will have very high creativity. This is consistent with the arguments presented by (Al-madadha 2014) **H2 accepted**. The statistical analysis results obtained: $\beta = 0.908$ with t-value 29.760, empowering leadership has a significant effect on employee creativity.

The increase in psychological empowerment is due to the leader's attitude who motivates, directs, and provides solutions; the impact is to build self-confidence in creative thinking, as in the psychological empowerment indicator, namely competence. The leader in Vascomm always motivates so that every employee can complete their tasks correctly. Through this motivation, the leader also gives employees the freedom to continue developing their skills by reading books or online courses useful in empowering their potential.

The meaning indicator, which means meaningful, is that employees must interpret this work as very important. The impact is when there are problems so that they can still identify problems and find creative solutions. Leaders also always encourage employees to take the initiative at work. Also, during meetings with leaders, employees are motivated to appreciate the work process with confidence. So that employees have the confidence to behave creatively because of the encouragement of themselves and their environment, the leader also emphasizes the priority scale of work to focus on doing something that can be obtained.

Hypothesis 3 the results reveal that psychological empowerment has a significant positive effect on employee creativity. These results explain that the better the psychological empowerment, the employee will have very high creativity. This is consistent with the arguments presented by (Javed & Arjoon, 2017). **H3 accepted**. The statistical analysis results obtained: $\beta = 0.744$ with t-value 2.727, psychological empowerment has a significant effect on employee creativity.

This research shows that employees' psychological empowerment is good; they can interpret their work, trust in a person's ability to perform tasks successfully, the perception of freedom to choose how to start and carry out tasks, and the view that one's behavior at work will affect work. When everything is coordinated within employees, employees can enjoy their work and create new ideas. Thus, the high psychological empowerment possessed by Vascomm Surabaya employees can increase employee creativity in doing their job.

For Hypothesis 4, the mediating relationship was introduced when psychological empowerment mediates between empowering leadership on employee creativity. The argument is that with an empowering leadership style will create psychological empowerment that positively affects employee creativity. This is consistent with the arguments presented by (Zhang & Bartol 2010; Javed & Arjoon 2017). **H4 accepted**. The bootstrap analysis shows that the indirect effect of the psychological empowerment variable: $\beta = 0.676$ is significant, with a t-value of 2.713. The hypothesis testing results show that psychological empowerment intervenes in the influence of empowering leadership on employee creativity. The analysis of this research can provide information that if the leader has motivated, directed, and empowered employees, it will make meaning in interpreting work, confidence in one's ability to successfully perform tasks, and the perception of freedom to choose how to start and carry out tasks to be able to make employees creative because they can look for breakthroughs in work, solve problems and have new ideas.

Managerial Implications

The findings reported in this study are significant because the value of the leadership empowerment relationship is the desire to improve creative work behavior through employee psychological empowerment. This knowledge

is very relevant to stakeholders and leaders, especially in these difficult times, COVID 19. Leaders must always motivate meetings, and employees must always look for new ideas in their work even though they work from home. By strengthening the empowering leadership relationship between employees and their leaders, to increase productivity, employee loyalty, creativity, employee confidence, and solve problems independently. Also, through research findings, individuals who assigned to leadership positions are made aware of traits such as honesty without ambiguity, empathy for employees, flexibility and adaptability, active listening to employee complaints, and humility, which are expected to be highly relevant in this COVID 19 period (Brownlee, 2020).

Limitations

This study's main limitation lies in using data obtained only from Information Technology companies with a small sample of Vascomm Surabaya Indonesia. It would be better if it was done with a broader coverage area or even if there were elements of cultural differences. The organizational structures in these companies must be different from those in other locations because there is intense competition between companies in the Era of 4.0 to innovate with each other about technology that can increase employee creativity. Second, by relying entirely on questionnaires given to employees only, this study failed to consider supervisors and managerial staff's views in general. Third, this research was conducted online, not directly to monitor filling out the questionnaire.

Conclusion

This study is an explicit attempt to understand leadership empowerment's role in spurring employee creativity at information technology company Vascomm in Surabaya, Indonesia. Leadership empowerment was found to have no direct effect on employee creativity. This study provides evidence that leadership empowerment does not directly create employee creativity. Managers need to be in the spotlight in continuing to develop employee creative effects. The leadership also gives employees the freedom to continue developing their abilities by reading books or online courses useful in empowering their potential. Employees are required to interpret this work is very important; the impact is when there is a problem so that they can still identify problems and find creative solutions. Leaders also always encourage employees to take the initiative at work. Also, in meetings with leaders, employees are motivated to appreciate the work process confidently. Employees have the confidence to behave creatively because of the encouragement from themselves and the company environment. However, for other representation, future studies should look to broaden the geographic scope of the study to include information technology companies from other countries.

Funding: This research received no external funding.

Acknowledgments: Authors would like to thank you for the support they have received from the leadership of Vascomm Surabaya and the Lecturers at the Postgraduate University of Surabaya, Indonesia.

Conflicts of Interest: The authors declare no conflict of interest

References

- Ahearne, M., Mathieu, J., & Rapp, A. (2005). *To empower or not to empower your sales force? An empirical examination of the influence of leadership empowerment behavior on customer satisfaction and performance.*
- Al-madadha, A. (2014). *Cardiff Metropolitan University The Influence of an Integrative Approach of Empowerment on the Creative Performance for Employees by Amro Al-Magadha.* 321.
- Amabile, T. M. (1997). Motivating creativity in organizations: On doing what you love and loving what you do. *California Management*, 40(1), 39–58.
- Amundsen, S., Martinsen, O. (2014). Empowering leadership: Construct clarification, conceptualization, and validation of a new scale. *Leadership Quarterly*, 25, 487–511.

- Amundsen, S., & Martinsen, Yvind L. (2014). Empowering leadership: Construct clarification, conceptualization, and validation of a new scale. *Leadership Quarterly*, 25(3), 487–511. <https://doi.org/10.1016/j.leaqua.2013.11.009>
- Amundsen, S., & Martinsen, Yvind L. (2015). Linking Empowering Leadership to Job Satisfaction, Work Effort, and Creativity: The Role of Self-Leadership and Psychological Empowerment. *Journal of Leadership and Organizational Studies*, 22(3), 304–323. <https://doi.org/10.1177/1548051814565819>
- Arief. (2019). *Perang Dagang Bikin Indeks Manufaktur Kuartal III/2019 Merosot*. *Bisnis.Com*.
- Arikunto, S. (2006). *Prosedur Penelitian Suatu Pendekatan Praktik* (Revisi IV). PT Asdi Mahasatya.
- Brown, M. E., Treviño, L. K., & Harrison, D. A. (2005). Ethical leadership: A social learning perspective for construct development and testing. *Organizational Behavior and Human Decision Processes*, 97(2), 117–134. <https://doi.org/10.1016/j.obhdp.2005.03.002>
- Brownlee, D. (2020). *7 Leadership Traits for the Post COVID-19 Workplace*.
- Byun, G., Dai, Y., & Kang, S. (2016). *When Does Empowering Leadership Enhance Employee Creativity? A Three-Way Interaction Test*. 44(9), 1555–1564.
- Farmer, Steven M., Tierney Pamele and Mcintyre, K. K. (2003). Employee Creativity in Taiwan: An Application Of Role Identity Theory. *Academy of Management Journal*, 46(5), 618–630.
- Firmandari, N. (2014). *Pengaruh Kompensasi Terhadap Kinerja Karyawan Dengan Motivasi Kerja Sebagai Variabel Moderasi*. Universitas Islam Negeri Sunan Kali Jaga Yogyakarta.
- Forrester, R. (2000). Empowerment: rejuvenating a potent idea. *Academy of Management Executive*, 14(3), 67–80.
- George, J. M., & Zhou, J. (2001). When openness to experience and conscientiousness are related to creative behavior: An interactional approach. *Journal of Applied Psychology*, 86(3), 513–524. <https://doi.org/10.1037/0021-9010.86.3.513>
- Ghozali, I. (2014). *Structural Equation Modeling: Metode Alternatif dengan Partial Least Square (PLS)* (Edisi Keem). Badan Penerbit Universitas Diponogoro.
- Javed, B., Khan, A. A., Bashir, S., & Arjoon, S. (2017). Impact of ethical leadership on creativity: the role of psychological empowerment. *Current Issues in Tourism*, 20(8), 839–851. <https://doi.org/10.1080/13683500.2016.1188894>
- Kementerian Keuangan. (2019). *Tantangan Indonesia dalam Menghadapi Revolusi Industri 4.0*.
- Liu, Wei, Lepak, David P, Takeuchi, Riki, & Sims, H. P. (2003). Matching Leadership Styles with Employment Modes: Strategic Human Resource Management Perspective. *Human Resource Management Review*, 13(1), 127–152.
- Mathis, R, L, dan J. (2002). *Manajemen Sumber Daya Manusia* (Jilid 1 da). Salemba Empat.
- Pearce, Craig L., Jr, Henry P. Sims, Cox, Jonathan F., Ball, Gail, Schnell, Eugene, Smith, Ken A., & Trevino, L. (2003). Transactors, transformers and beyond : A multi-method development of a theoretical typology of leadership. *Journal of Management Development*, 22(4), 273–307.
- Roellyanti, M. V. (2015). *Empowering Leadership Dan Peran Intrinsic Motivation Sebagai Variabel Mediasi Dalam Upaya Meningkatkan Employee Creativity Among Makarti*. 8, 1–11.
- Shalley, Christina E, Zhou, Jing, & Oldham, G. R. (2004). The effects of personal and contextual characteristics on creativity: where should we go from here. *Journal of Management*, 30(6), 933–958.
- Slatten, T. (2011). Empowering leadership and the influence of a humorous work climate on service employees' creativity and innovative behavior in frontline service jobs. *International Journal of Quality and Service Sciences*, 3(3), 267–284. <https://doi.org/10.1108/17566691111182834>
- Spreitzer, G. M. (1995). Psychological empowerment in the workplace: dimensions, measurement, and validation. *Academy of Management Journal*, Vol.38, 1442– 1465.
- Sugianto. (2019). *Pembangunan Sumber Daya Manusia (SDM) Menuju Indonesia Unggul*.
- Sugiyono. (2017). *Statistik Untuk Penelitian*. Alfabeta.
- Zhang, X. and B. K. (2010). *Linking Empowering Leadership and Employee Creativity: The Influence of Psychological*

Empowerment, Intrinsic Motivation and Creative Process Engagement. 53(1), 107–128.

Zhang, X., & Zhou, J. (2014). Organizational Behavior and Human Decision Processes Empowering leadership, uncertainty avoidance, trust, and employee creativity: Interaction effects and a mediating mechanism. *Organizational Behavior and Human Decision*, 124(2), 150–164.
<https://doi.org/10.1016/j.obhdp.2014.02.002>

Antecedents of Overall E-service Quality and Brand Attachment in the Banking Industry

Gul-e-Rana *¹, Dr. Noor Azizah Mohamadali ²

¹Kulliyah of Information and Communication Technology, International Islamic University Malaysia (IIUM), Malaysia and Department of Management Sciences, Yanbu University College, Yanbu, Saudi Arabia

²Kulliyah of Information and Communication Technology, International Islamic University Malaysia (IIUM), Malaysia

* Corresponding author: guleranna@gmail.com

Article History

Received 2020-09-02

Revised 2020-10-15

Accepted 2020-10-16

Published 2020-10-27

Keywords

Brand Attachment

Website Design

E-fulfillment

Overall e-service quality

How to cite?

Gul-e-Rana, & Mohamadali, N. A. (2020). *Antecedents of Overall E-service Quality and Brand Attachment in the Banking Industry*. *SEISENSE Journal of Management*, 3(6), 26-34. doi: 10.33215/sjom.v3i6.451

Copyright © 2020 The Author(s)



Abstract

Purpose – The study aims to examine the impact of website design, e-fulfillment, e-service and e-security on overall e-service quality and its impact on brand attachment.

Design/methodology/approach – Data of 425 respondents was collected from the internet banking industry users through an online survey. Further, PLS-SEM was employed to analyze the data.

Findings – Results indicate that the impact of e-security, e-customer service, and e-fulfillment on overall e-customer service quality was supported. In contrast, the impact of website design was not supported. Further, overall, e-service quality also has a significant impact on brand attachment.

Originality/value – This study suggested and tested a brand attachment framework for the banking industry to support strategy formulation for managers.

Introduction

Brand attachment captures emotional and cognitive bonding and represents the connection of brand and self (Park, MacInnis, & Priester, 2006). Park, MacInnis, Priester, Eisingerich, and Iacobucci (2010) argued that brand and self-connection are recognized by the extent of easiness they bring in customers' minds. Likewise, the brand is a distinctive personality, and customers develop a relationship with the brand in the same way as they do with people even though brands have different attributes (Chowdhury, Chun, Choi, & Friend, 2020; Thach & Olsen, 2006). Hence, brand attachment refers to a strong bond between individuals and brands (Park et al., 2010). Organizations are providing online services structure users' minds to save their time by learning e-services. E-service quality is assessed based on the time of users it saves and fewer hassles it offers, and according to Thach and Olsen (2006), such type of services may cause customers to attach to the brand. Customers can develop a forging relation of a companion with a brand (Dennis, Papagiannidis, Alamanos, & Bourlakis, 2016; Wu, Cai, & He, 2019). Rana, Azizah, Ali, Shah, And Muhammad (2018) also argued that overall e-service quality might enhance a customer's attachment towards a brand providing such services. However, overall, e-service quality can support brand attachment and need to be answered (Blut, Chowdhry, Mittal, & Brock, 2015; Rana et al., 2018).

The concept of service quality remained popular for almost from the previous two decades. Recent technological developments propel this concept to e-commerce, mainly due to the emergence of internet marketing. Researchers are almost agreed that the concept of e-service quality is different from service quality in an offline setting. Since in e-commerce, service quality refers to virtual markets in online settings. Hence, what leads to overall e-service quality in the banking industry is still being debated. This current study is keen to address these questions above, drawing on brand attachment theory.

Based on attachment theory (Bowlby, 1979), this study tends to have theoretical and practical contributions. One current study considers the impact of overall e-service quality on brand attachment in the banking industry, which was yet to be considered (Rana et al., 2018). Two, though the researchers have considered the impact of different constructs on overall e-service quality, the individual effect of e-fulfillment, website design, e-customer service, and security is yet to be considered. This study will empirically test and evaluate the individual influence of each construct on overall e-service quality. Finally, this study also made efforts to have contributions for managers and research students. This study will argue the factors propelling overall e-service quality and its subsequent effect on brand attachment for managers. Hence, managers can adjust their branding strategies. For research students, the concept of branding in the banking industry will further ignite the research. Next, brand attachment theory, literature review, and hypothesis development is discussed, followed by methodology and results. Finally, discussions are made.

Brand Attachment Theory

Brand attachment theory (Bowlby, 1979) suggests that the scenes, impressions, and experiences are essential to shaping attachment. Based on brand attachment theory, this study, e-fulfillment, website design, e-customer service, and security, is considered scenes and impressions, overall e-service quality as experience while brand attachment as an attachment. Brand attachment theory (Bowlby, 1979) is essential to consider these linkages, particularly in the online banking industry context. Next, details on the literature review and hypothesis development are discussed.

Literature Review and Hypothesis Development

Overall e-service quality and brand attachment

Brand attachment refers to a state of mind to feel a strong connection with a brand. Accordingly, Phillips and Baumgartner (2002) argued that attachment results from long-term relationships between customers and those who provide services. The service firm achieves it via reasonable marketing efforts. E-service quality is referred to as customers assessing e-service quality in virtual market service (Van Riel, Liljander, & Jurriens, 2001). Whether overall e-service quality impacts brand attachment is yet to be answered (Blut *et al.*, 2015). An individual can emotionally attach to a particular object based on the interaction between the object and the particular individual (Thomson, MacInnis, & Park, 2005). While attachment theory considers and concentrates more on interactions (Bowlby, 1979), these interactions can be in online settings. Customers attribute human characteristics to different brands and may have relation with brands in the same way as they do with humans (Aaker, 1997; Fournier, 1998). A shortage of research has examined the impact of overall service quality on the banking industry's brand attachment. Hence, based on attachment theory (Bowlby, 1979) and aforementioned arguments, the following relationship is hypothesized;

H1: E-service quality will positively influence brand attachment.

Website design and overall e-service quality

According to Riaz, Gregor, and Lin (2018), website design is a joint function of a website that facilitates online users' experience in offline settings. In addition to this, it is shaping cyberspace following physical space. In the banking industry, websites are an essential source of online information. Websites provide various information (Manika, Gregory-Smith, & Papagiannidis, 2018) on bank offerings, particularly about account opening procedures, deposit rates, credit cards, personal finance, auto finance, and home financing. A good website is a source of positive impressions and opinions. It is well established in the literature that a well-designed website can improve customers' perceptions about a service firm (Foroudi *et al.*, 2018). Hence, the banking industry is the one that directly can be affected, where the website became intermediary between a customer and the bank for disseminating information regarding balance, account statement, and enabling customers to do transactions. Hence, in the banking industry, it can be argued that the better the perception of website design better be the perception of overall e-service quality and the following relationship is hypothesized;

H2: Website design and overall e-service quality are positively related to each other.

Fulfillment and overall e-service quality

Fulfillment is considered an organization's ability to ensure that customers received the same what they think they asked for (Blut, 2016). Fulfillment refers to an organization's ability to provide promised service perfectly (Stank *et al.*, 1999, 2003). In the financial service sector, banks encourage their customers to use online sites (Al-Hawari and Ward, 2006). Customers notice about value and convenience they are given by their banks (Lewis and Soureli, 2006). Thus, it can be assumed in the banking industry that customer fulfillment can be related to overall e-service quality. Hence, this can be hypothesized as;

H3: Fulfillment will have a positive relationship with overall e-service quality.

E-service and overall e-service quality

According to Zeithaml, Bitner, and Gremler (2006), e-customer service is a service that can be delivered through the internet. Accordingly concept of e-customer service has developed, and now organizations have realized the importance of satisfying their customers by providing better services online (Bottani & Rizzi, 2006). Thus, considering customer service's importance due to their organizational profitability contribution, organizations

consider it an important part to excel in the market. The banking sector is developing continuously due to immense competition, discerning customers, globalization, and improved services (Ramseook-Munhurrin & Naidoo, 2011). To become more effective, competitive, and flexible, banks realize the importance of internet usage benefits to satisfy their modern customers. Thus, it can be argued that better customer services may be positively related to overall e-service quality. Furthermore, better customer service is considered to contribute more to overall e-service quality. Based on these arguments, we may propose that:

H4: Customer service will positively influence overall e-service quality

Security and overall e-service quality

Security is a customer's concern about the privacy and security of their online banking transactions. Customers are concerned about their personal information and are also conscious of financial loss when they pay through their credit cards (Blut, 2016; Bressolles et al., 2014). Customers also expect organizations to protect their customers from junk emails, theft, and fraudulent activities. Customers can avoid online services due to banks' online security risks (Qayyum, Rehman, Saleemi, Ilyas, & Rafiq, 2018). Based on these arguments, this study considers the effect of e-security on overall e-service quality and hypothesized that;

H5: Security will have a positive impact on overall e-service quality

Methodology

The data was collected from the banking customers who used online banking services in an Asian banking industry context, Pakistan, by using an online survey. To decide on sample size Gpower calculator was used. The maximum number of arrows pointing to a construct was 4; the effect size was considered as 0.05, and the power required was 0.90; the required sample size was 313. This study was set out more than the minimum required sample size.

The scales of the constructs were adopted from the previous literature. Website design (5 items), fulfillment (3 items), e-customer service (3 items), and security (3 items) were borrowed from Wolfinbarger and Gilly (2003). Overall e-service quality scale was borrowed from Carlson and O'Cass (2011) with three items, while brand attachment with eight items was adopted from Chiou, Chi-Fen Hsu, and Hsieh (2013). After conducting the pilot test, the primary data was collected. At the design stage, it was ensured that once the customers respond to all the required items, they can proceed with the response submission. Hence, there was no missing value in the data.

Results

This study compromised on data of a total of four hundred and twenty-five respondents. Out of these respondent's 30.4 percent were female, and 69.6 were male. Only 6.6 percent of the respondents were using the internet for less than one hour, while 32.5 percent were using 1-3 hours, 28.5 percent were using 3-5, 15.8 percent were using 5-7 hours, and 16.2 percent were using the internet above 7 hours. Further, to evaluate the results, partial least structural equation modeling is used by employing SmartPLS3. This approach considers the measurement model first, and on a satisfactory measurement model, hypotheses are evaluated (Muhammad, 2019). Accordingly, the measurement model was evaluated first.

Measurement Model

Reliability and validity were considered in the measurement model (Hair, Hult, Ringle, & Sarstedt, 2016; Muhammad, 2019). To test the measurement model PLS algorithm was run. Items BraA3, BraA4, OSQ1 were deleted due to high cross-loadings, and the model was reassessed. For reliability, Cronbach alpha (CrA) and composite reliability (CR) were assessed. The values of CrA and CR were more significant than

the minimum threshold of 0.7. Hence, having satisfactory reliability (Hair et al., 2016; Muhammad & Gul-E-Rana, 2020).

For convergent validity, loadings, and average variance extracted (AVE) were considered. Table 1 shows the loadings and AVE values greater than 0.707 and 0.50, respectively, to confer a good convergent validity (Hair et al., 2016).

Table 1: Reliability and convergent validity

Items	Loadings	CrA	CR	AVE
BrA1	0.796	0.921	0.938	0.716
BrA2	0.861			
BrA5	0.838			
BrA6	0.850			
BrA7	0.871			
BrA8	0.860			
ESer1	0.832	0.825	0.896	0.741
ESer2	0.864			
ESer3	0.886			
OSQ2	0.948	0.880	0.943	0.893
OSQ3	0.942			
EFul1	0.820	0.811	0.888	0.725
EFul2	0.868			
EFul3	0.866			
ESec1	0.912	0.895	0.935	0.827
ESec2	0.921			
ESec3	0.895			
WeD1	0.831	0.868	0.904	0.654
WeD2	0.811			
WeD3	0.827			
WeD4	0.734			
WeD5	0.838			

Heterotrait-Monotrait Ratio (HTMT) was suggested by Henseler, Ringle, and Sarstedt (2015) to evaluate discriminant validity. HTMT values should be 0.90 or less for discriminant validity. The results in Table 2 indicate that HTMT values were less than 0.90 to have a satisfactory discriminant validity, as shown in Table 2. Once the measurement model was found satisfactory for reliability and validity, then the structural model was assessed.

Table 2: Heterotrait-Monotrait Ratio (HTMT)

	BrA	EFul	ESec	ESer	OSQ	WeD
BrA						
EFul	0.589					
ESec	0.485	0.800				
ESer	0.690	0.812	0.691			
OSQ	0.695	0.820	0.693	0.788		
WeD	0.581	0.889	0.794	0.755	0.719	

Structural Model

To evaluate the structural model, t-statistics, effect size, and variance explained, R^2 and Q^2 were evaluated (Muhammad, Mahadi, & Hussin, 2017). To evaluate t-values, a bootstrapping procedure with 5000 subsamples was run as suggested by (Hair et al., 2016; Muhammad & Gul-E-Rana, 2020). The results indicated in Table 3, show that H1 ($\beta = 0.626$, $p < 0.000$), H3 ($\beta = 0.320$, $p = 0.000$), H4 ($\beta = 0.315$, $p = 0.000$) and H5 ($\beta = 0.149$, $p = 0.023$) were supported, while H2 ($\beta = 0.068$, $p = 0.189$) was rejected. The effect sizes f^2 were ranging from 0.023 to 0.645. Effect f^2 0.02 is considered small, 0.15 as a medium, and 0.35 as large (Cohen, 1992). Hence, the effect sizes of exogenous constructs on endogenous constructs in the proposed model ranged from small to large. Overall, e-service quality (OSQ) explained 39.2 percent in the brand attachment (BrA). While, Website design (WeD), e-fulfillment (EFul), e-service (ESer), and e-security (ESec) collectively explained 58.3 percent of variance in OSQ. In addition to this Q^2 values for predictive relevance were greater than zero. These values were obtained by using a blindfolding approach in SmartPLS3. In sum, all hypotheses were accepted, except H2, as shown in Table 3.

Table 3: Hypothesis results

Hyp	Paths	β	Std. Error	t-values	p-values	f^2	R^2	Q^2	Decision
H1	OSQ -> BrA	0.626	0.046	13.729	0.000	0.645	0.392	0.261	Accepted
H2	WeD -> OSQ	0.089	0.068	1.315	0.189	0.007			Rejected
H3	EFul -> OSQ	0.320	0.066	4.879	0.000	0.089	0.583	0.490	Accepted
H4	ESer -> OSQ	0.315	0.058	5.408	0.000	0.118			Accepted
H5	ESec -> OSQ	0.149	0.060	2.484	0.013	0.023			Accepted

Discussion

The study aimed to examine the impact of website design, e-fulfillment, e-customer service, and e-security on overall e-service quality and overall e-service quality on brand attachment in the banking industry was yet to be considered. The impact of overall e-service quality on brand attachment was supported (H1). This result can be explained in the light of brand attachment theory (Bowlby, 1979), which states that the extent to which an individual is emotionally attached to a particular object envisages the interaction with that object (Thomson et al., 2005). Furthermore, attachment theory focuses on human interactions, but literature also shows this relation between humans and brands they use (Aaker, 1997; Fournier, 1998). Hence, this might be why the impact of overall e-service quality on brand attachment was supported. The impact website design overall e-service quality was not supported (H2). This finding is consistent with the argument of Dedeke (2016). Dedeke (2016) argued that e-retailers need to overemphasize the website design's e-service quality as perceived by consumers. Since information task fit affects perceived quality more than web design quality, another reason might be the website with pertinent information, leaving a good impression on consumers compared to the website with less appropriate information despite good design.

The impact of e-fulfillment on overall e-service quality was supported (H3). Recent advancements in technology have changed the service delivery options, specifically in service industries (Dennis, Merrilees, Herington, & Weaven, 2009). Hence customer's perceptions about overall e-service quality are dependent on these exchanges between customers and banks (Jabnoun & Hassan Al-Tamimi, 2003). Hence, the value and convenience they receive from their banks are noticed by them (Lewis & Soureli, 2006), which may be considered a source for evaluating the overall e-service quality. Hence, this might be the reason that the impact of e-fulfillment was supported on overall e-service quality.

The impact of e-customer service on overall e-service quality was also supported (H4). The banking sector is having immense competition and is increasing better services and effectiveness in processes. Hence, to become

more effective, flexible, and competitive, banks have now realized the importance of the internet to provide customer service better. This discussion concludes that banks should focus on providing better customer services to develop their positive perceptions about overall e-service quality. As researchers also emphasized, the banking sector needs to develop strategies that enhance the overall e-service quality of banks (e.g., Goyal & Chanda, 2017). Finding in this study is also consistent with this argument and the impact of e- customer service found to influence overall e-service quality positively.

Finally, the impact of e-security on overall e-service quality was also supported (H5). Online security requires system configuration and third-party endorsement by representing signs and logos known to customers to protect their online transactions. In addition to this, Lee and Turban (2001) also claimed that customers need to check how organizations will protect their personal information and their financial details. Moreover, Chien-Ta Ho and Oh (2009) also argued that e-security seals could shape the customer's trust in websites in an entirely different way. Such studies emphasize getting security assurance by customers during their online transactions because customers can't see the trustworthiness standards visibility. Hence, if companies want to use security seals, they should follow the standards established by third parties to reduce the customers' fear of security. In Pakistani banking, the banking industry's regularity authority assures the customers of banking industry customers to protect financial aspects. This might be the reason that the impact of e-security is supported. Such findings have contributions to theory and practice.

Theoretical Contributions

Brand attachment is an important but unexplored area that needs to be considered by researchers, particularly in online settings (Blut et al., 2015). Further, the parameters that increase overall e-service quality in banks were yet to be considered (Goyal & Chanda, 2017). Therefore, this study contributes to the literature by shedding light on this unexplored area and has considered the impact of overall e-service quality on brand attachment and website design, e-fulfillment, e-service and e-security on overall e-service quality. Findings of this study open new avenues to researchers for better understanding the antecedents of overall e –service quality and thereof impact overall e-service quality on brand attachment in banking industry.

Managerial Contributions

In the banking industry context, this study is important to explore those factors that may influence customers' overall e-service quality and enhance brand attachment to help manager for strategy formulation. This study's results would help policymakers and practitioners of the banking industry understand all significant dimensions of overall e-service quality. Managers can enhance customers' perceptions of overall e-service quality by improving customer service, ensuring secure transactions and e-customer services, and fulfilling their requests on time. Additionally, in service sectors, customers want to have order fulfillment on time. This study suggests that banks should ensure their systems' technical maintenance efficiency to create a better image of order fulfillment and security as a reliable banking firm. Banks need to maintain consistency in providing better services to maintain and enhance their customers' brand attachment and provide unique services is the best way to position the customer's minds and build a strong image of their brand.

Limitations of the study

This study also has some limitations. The majority of the study respondents were using the internet for more than one hour per day. Hence, the finding should be interpreted accordingly, and banks need to have different strategies to attract those customers for brand attachment who are not using the internet. Further, the study aimed to consider antecedents and outcomes. Accordingly, the mediating role of overall e-service quality was not considered. Future research may consider how e-fulfillment, website design, e-customer service, and security affect brand attachment via overall e-service quality by considering overall e-service quality as a mediator.

Further, in developing countries, such customers are in a reasonable number. Such a future study might be necessary for attracting customers for brand attachments who are not internet users. This study considered the banking industry. It would be interesting to test the current research framework in different industries and cultures to validate or contradict the results. Future research may consider the influence of overall e-service quality on willingness to pay and behavioral loyalty in the banking industry. In sum, this reasonable effort to fill the gaps in the literature about overall e-service quality and brand attachment in the banking industry.

Funding: This research received no external funding.

Conflicts of Interest: The authors declare no conflict of interest.

References

- Aaker, J. L. (1997). Dimensions of brand personality. *Journal of marketing research*, 34(3), 347-356.
- Blut, M., Chowdhry, N., Mittal, V., & Brock, C. (2015). E-service quality: A meta-analytic review. *Journal of retailing*, 91(4), 679-700.
- Bottani, E., & Rizzi, A. (2006). Strategic management of logistics service: A fuzzy QFD approach. *International journal of production economics*, 103(2), 585-599.
- Bowlby, J. (1979). On knowing what you are not supposed to know and feeling what you are not supposed to feel. *The Canadian Journal of Psychiatry*, 24(5), 403-408.
- Carlson, J., & O'Cass, A. (2011). Developing a framework for understanding e-service quality, its antecedents, consequences, and mediators. *Managing Service Quality: An International Journal*, 21(3), 264-286. doi:10.1108/09604521111127965
- Chien-Ta Ho, B., & Oh, K.-B. (2009). An empirical study of the use of e-security seals in e-commerce. *Online Information Review*, 33(4), 655-671.
- Chiou, J.-S., Chi-Fen Hsu, A., & Hsieh, C.-H. (2013). How negative online information affects consumers' brand evaluation. *Online Information Review*, 37(6), 910-926. doi:10.1108/oir-02-2012-0014
- Chowdhury, R., Chun, W., Choi, S., & Friend, K. (2020). Brand and firm values in distinct national cultures. *Asia Pacific Journal of Marketing and Logistics*.
- Cohen, J. (1992). A power primer. *Psychological bulletin*, 112(1), 155.
- Dedeke, A. N. (2016). Travel website design: Information task-fit, service quality and purchase intention. *Tourism Management*, 54, 541-554.
- Dennis, C., Merrilees, B., Herington, C., & Weaven, S. (2009). E-retailing by banks: e-service quality and its importance to customer satisfaction. *European journal of marketing*.
- Dennis, C., Papagiannidis, S., Alamanos, E., & Bourlakis, M. (2016). The role of brand attachment strength in higher education. *Journal of Business Research*, 69(8), 3049-3057.
- Foroudi, P., Akarsu, T. N., Ageeva, E., Foroudi, M. M., Dennis, C., & Melewar, T. C. (2018). PROMISING THE DREAM: Changing destination image of London through the effect of website place. *Journal of Business Research*, 83, 97-110. doi:10.1016/j.jbusres.2017.10.003
- Fournier, S. (1998). Consumers and their brands: Developing relationship theory in consumer research. *Journal of consumer research*, 24(4), 343-373.
- Goyal, P., & Chanda, U. (2017). A Bayesian Network Model on the association between CSR, perceived service quality and customer loyalty in Indian Banking Industry. *Sustainable Production and Consumption*, 10, 50-65.
- Hair, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2016). A primer on partial least squares structural equation modeling (PLS-SEM): Sage publications.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the academy of marketing science*, 43(1), 115-135.

- Jabnoun, N., & Hassan Al-Tamimi, H. A. (2003). Measuring perceived service quality at UAE commercial banks. *International Journal of Quality & Reliability Management*, 20(4), 458-472.
- Lee, M. K., & Turban, E. (2001). A trust model for consumer internet shopping. *International Journal of electronic commerce*, 6(1), 75-91.
- Lewis, B. R., & Soureli, M. (2006). The antecedents of consumer loyalty in retail banking. *Journal of Consumer Behaviour: An International Research Review*, 5(1), 15-31.
- Manika, D., Gregory-Smith, D., & Papagiannidis, S. (2018). The influence of prior knowledge structures on website attitudes and behavioral intentions. *Computers in Human Behavior*, 78, 44-58. doi:10.1016/j.chb.2017.09.024
- Muhammad, L. (2019). Do service firm employee and customer relations matter for customer forgiveness in service recovery? *Asia Pacific Journal of Marketing and Logistics*.
- Muhammad, L., & Gul-E-Rana. (2020). Mediating role of customer forgiveness between perceived justice and satisfaction. *Journal of Retailing and Consumer Services*, 52, 101886.
- Muhammad, L., Mahadi, B., & Hussin, N. (2017). Influence of social capital on customer's relationship satisfaction in the Pakistani banking industry. *Asia Pacific Journal of Marketing and Logistics*.
- Park, C. W., MacInnis, D. J., Priester, J., Eisingerich, A. B., & Iacobucci, D. (2010). Brand attachment and brand attitude strength: Conceptual and empirical differentiation of two critical brand equity drivers. *Journal of Marketing*, 74(6), 1-17.
- Park, C. W., MacInnis, D. J., & Priester, J. R. (2006). Beyond attitudes: Attachment and consumer behavior. *Seoul National Journal*, 12(2), 3-36.
- Phillips, D. M., & Baumgartner, H. (2002). The role of consumption emotions in the satisfaction response. *Journal of consumer psychology*, 12(3), 243-252.
- Rana, G., Azizah, N., Ali, M., Shah, A., & Muhammad, L. (2018). Impact of E-service Quality on Brand Attachment and Willingness to Spend More. *Sindh University Research Journal (Science Series)*, 50(3D), 214-215.
- Riaz, A., Gregor, S., & Lin, A. (2018). Biophilia and biophobia in website design: Improving internet information dissemination. *Information & Management*, 55(2), 199-214. doi:10.1016/j.im.2017.05.006
- Thach, E. C., & Olsen, J. (2006). The role of service quality in influencing brand attachments at winery visitor centers. *Journal of Quality Assurance in Hospitality & Tourism*, 7(3), 59-77.
- Thomson, M., MacInnis, D. J., & Park, C. W. (2005). The ties that bind: Measuring the strength of consumers' emotional attachments to brands. *Journal of consumer psychology*, 15(1), 77-91.
- Van Riel, A. C., Liljander, V., & Jurriens, P. (2001). Exploring consumer evaluations of e-services: a portal site. *International Journal of service Industry management*, 12(4), 359-377.
- Wolfenbarger, M., & Gilly, M. C. (2003). eTailQ: dimensionalizing, measuring and predictingetail quality. *Journal of Retailing*, 79(3), 183-198. doi:10.1016/s0022-4359(03)00034-4
- Wu, Y., Cai, Y., & He, J. (2019). How brand concepts represented as human values promote evaluation. *Asia Pacific Journal of Marketing and Logistics*.
- Zeithaml, V. A., Bitner, M. J., & Gremler, D. D. (2006). Integrating customer focus across the firm. *Services marketing*, New York, Mc-Graw-Hill/Irwin.

Management of Exchange Rate Risk in SMEs: Reflections on Exchange Rate Pass-through and Hedging of Currency Risk

Imtiaz Badshah ^{*1}, Trond-Arne Borgersen ²

^{1, 2} Østfold University College-Norway

* Corresponding author: imtiaz.badshah@hiof.no

Article History

Received 2020-09-21

Revised 2020-11-07

Accepted 2020-11-07

Published 2020-11-11

Keywords

SME exporters,
exchange rate pass-through,
FX-hedging

How to cite?

Badshah, I., & Borgersen, T.-A.
*Management of Exchange Rate Risk in
SMEs: Reflections on Exchange Rate
Pass-through and Hedging of Currency
Risk. SEISENSE Journal of
Management*, 3(6), 35-49. doi:
[10.33215/sjom.v3i6.474](https://doi.org/10.33215/sjom.v3i6.474)

Copyright © 2020 The Author(s)



Abstract

Exchange rate fluctuations represent a challenge for the internationalization of all firms, both big and small. This paper reflects on two aspects of the exchange rate challenge - (i) the exchange rate pass-through and (ii) hedging of exchange rate risk and how SMEs manage these two aspects of exchange rate risk. The exchange rate challenges that SMEs face might differ from the risks larger firms are exposed to, and their management of the risks might vary. In family-owned SMEs, longer planning horizons than listed firms might imply a weaker exchange rate pass-through, while smaller financial buffers might pull pass-through rules in the opposite direction for the same SMEs. When considering hedging, the paper argues for both operational hedging and external hedging to represent a management challenge for SMEs, pushing the exchange rate risk towards the forefront of the factors hampering internationalization among SMEs.

Introduction

The paper is concerned with how small- and medium sized enterprises (SMEs) manage the exchange rate challenges they face when entering foreign markets. Being a relative price, exchange rates move somewhat unpredictably and, at least in the short run, suffer exchange rate theories from weak explanatory power (Amiti, Itskhoki, & Konings, 2014).

For a firm operating in a foreign market, where income and costs are in different currencies, the exchange rate is a challenge, and how it is managed crucial. Hence the paper reflects on SMEs' management of exchange rate risk. Using the textbook method as a benchmark, the paper demonstrates strategies to manage exchange rate risk among SMEs. As textbooks often analyze large(er) firms, this approach implicitly compares SMEs' behavior to big(ger) exporting firms. The paper reflects both on whether the literature distinguishes the exchange rate challenge concerning an exporter's size and whether these exporters manage their exchange rate challenges differently.

We restrict ourselves to two particular – but positively related – themes. The first is the exchange rate pass-through, which analyses how exporting firms incorporate exchange rates into pricing rules. The second is foreign exchange risk (FX) hedging and the extent to which SMEs hedge foreign currency risk. When analyzing hedging, we restrict ourselves to transaction risk, leaving aside translation and economic risk (Hagelin, 2003) for exchange rate risk), as transaction risk is most relevant for SMEs.

In terms of pricing, we consider both cost-based and market-based pricing strategies. The paper reflects on how SMEs' characteristics, such as ownership structure, product characteristics, funding, and location (relative to funding sources) impact foreign market-based pricing rules among SMEs (Achterberg, Omar, Ambituuni, & Roll, 2018) for an introduction to foreign trade and foreign market pricing). We consider how competition structures and the distinction between mass- and niche products impact exchange rate pass-through. Finally, when analyzing hedging strategies, we argue that hedging costs are a part of cost-based pricing rules in foreign markets, which is especially important when managing SME's international market operations.

The rest of the paper is structured as follows. The second section gives a brief introduction to SMEs' internationalization process, focusing mainly on the role of exchange rates in the presence of foreign market entry costs. The third section considers SME's foreign market pricing rules and different exchange rate pass-through components relevant to SMEs' exchange rate risk. The fourth section considers hedging strategies and how SMEs manage their exchange rate risk. Section 5 provides discussion, while the last part, section 6, concludes the paper.

Literature Review

Internationalization of SMEs

The internationalization process of SMEs is the focus of several papers (Bell, Crick, & Young, 2004; Bose, 2016; Clercq, Sapienza, & Crijns, 2005; Fernández & Nieto, 2005; Kunday & Şengüler, 2015; Ruzzier, Hisrich Robert, & Antoncic, 2006).

Different structures characterize different markets, and when entering new markets, it is necessary to become acquainted with both a new market structure and new competitors. This, of course, is true for any new market, domestic or foreign.¹ When entering a foreign market, the exchange rate comes into play, a feature unique to international markets. As exchange rate movements are difficult to predict, aspects related to the exchange rate

¹ See Bowen et al. (1998) for a general approach to trade theory and applied analysis of foreign market analysis.

represent a challenge to SMEs' internationalization. Still, for a firm that sells products abroad and receives income in a currency different from its production cost, the exchange rate and rate at which income may be converted into domestic currency are crucial for foreign market profitability.

The exchange rate is relevant to all firms operating in international markets. If one considers the linear internationalization structure of Meissner and Gerber (1980), where import and export are the first steps on the internationalization ladder (Figure 1), the challenges related to exchange rate movements might differ across firms at different stages of internationalization.

Analyzing the risk associated with exchange rates, Hagelin (2003) separates transaction, translation, and economic risk. Figure (1) sees how transaction risk is the dominant type of exchange risk for SMEs at the first stages of the internationalization ladder. As firms enter joint ventures, start foreign manufacturing or acquire foreign currency assets, and internationalization matures, translation and economic risk become increasingly relevant.²

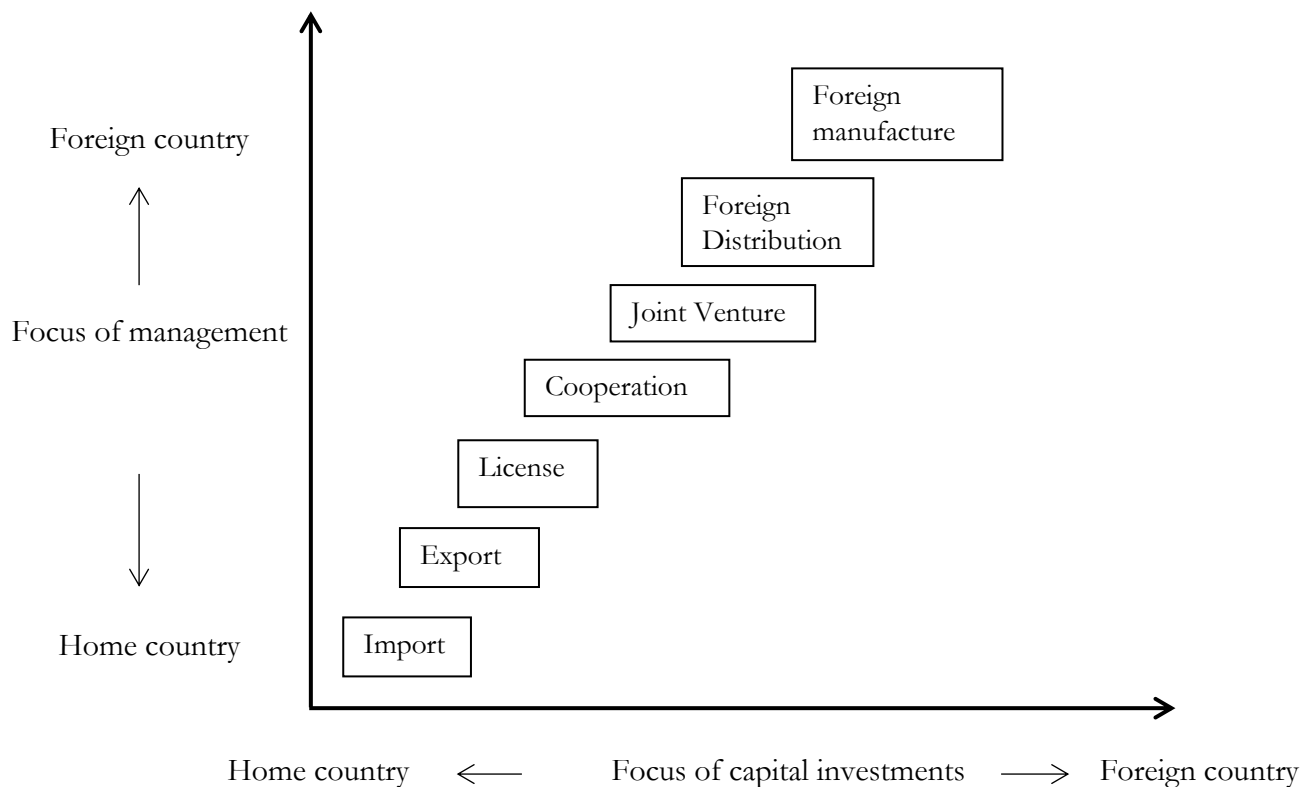


Figure 1 - The internationalization process

Source: Meissner and Gerber (1980,) p. 224.

A linear structure might falsely give the impression that internationalization is a straightforward process. Increasing, decreasing, and re-increasing commitment to foreign markets by SMEs is discussed by Dominguez

² While separating transaction and translation risk is straightforward in theory, the balance sheet effect that translation risk represents is a potential source for pass-through variations. Borgersen (2016) analyses the exchange rate response of credit constrained exporters and shows how export market behavior might be affected by balance sheet effects where, for SMEs at the beginning of the internationalization process, transaction risk might be non-negligible.

and Mayrhofer (2017) and Langseth, O'Dwyer, & Arpa (2016), while the distinction between gradualists and born global is the focus of, e.g., Bell, McNaughton, Young, & Crik (2003) and Kalinic & Forza (2012). Today there seems to be an acceptance of modifications to the gradualist so-called Uppsala model (U-model) of SME internationalization (Johanson & Vahlne, 1990). The modification path began during the mid-1990s as some papers showed potential for more rapid internationalization among SMEs than predicted by the U-model (Johanson & Vahlne, 2009; Oviatt & McDougall, 1994). A more rapid internationalisation process is related to SMEs' knowledge and international networking activities (Oviatt & McDougall, 2005).

While important, SMEs' exchange rate challenge is rarely at the core of discussions regarding SMEs' internationalization. The literature elaborates on a minimum of 11 concrete challenges to internationalization.³ Several of these challenges are directly related to the exchange rate. Some are obvious, while others are more subtle. While the relation between pricing and exchange rates falls within the former category, the foreign market entry link is more subtle.⁴

The role of exchange rate shocks concerning firms' ability to enter and operate in foreign markets is a standing issue in international trade theory. The costs associated with entering a foreign market make exporting differ between a potential new entrant and an established exporter. The non-linear export supply curve of Baldwin and Krugman (1989), pictured in Figure 2, illustrates an entry problem relevant to SMEs internationalization.

Market entry costs produce a non-linear export supply curve and a “hysteresis band” between an entry exchange rate trigger and an exchange rate exit trigger. A temporary exchange rate shock shows the relevance of exchange rates for entry – and operating – decisions. Suppose we assume an exchange rate process ($q_0 \rightarrow q_1$) and back ($q_1 \rightarrow q_0$), we find non-trivial effects on the internationalization of an SME, which we assume initially does not export. As the exchange rate moves above the entry trigger, ($q_1 > \alpha_j$) it becomes profitable for an SME to incur the entry cost and begin exporting. When the exchange rate falls back to the initial level (q_0), the SME does not cease exporting, as it has incurred the entry costs. A corrective appreciation is necessary to make SMEs cease exporting because the exchange rate that triggers exit is lower ($q_2 < \beta_j$).

³ A blog posted by R. Katie argues the eleven biggest challenges to internationalization as (1) international company structures, (2) foreign law and regulation, (3) international accounting (4) global pricing strategies and cost calculations, (5) universal payment methods, (6) currency, (7) choosing the right global shipment methods (8) communication difficulties and cultural differences, (9) political risks, (10) supply chain complexity and the risk of labour exploitations and (11) worldwide environmental issues. (Katie, 2017) <http://www.hult.edu/blog/international-business-challenges/>.

⁴ For SMEs, accounting rules that come into play with internationalization, and a foreign currency income cash flow, are relevant for the ability to operate in international markets. How to deal with exchange rates is relevant in terms of both international accounting rules and tax compliance regulations. To avoid unnecessary taxes and inefficient adaption to foreign markets, one needs to understand accounting rules and tax treaties between countries prior to moving abroad. Scarce management capacity among SMEs might in this regard represent a substantial hinderance to internationalisation. Companies registered in the European Union may, for instance, take advantage of “the Common Consolidated Corporate Tax Base (CCCTB)” where companies operating in the EU can limit tax liability to one corporate center, an opportunity not necessarily as accessible to SMEs as larger firms. (https://ec.europa.eu/taxation_customs/business/company-tax/common-consolidated-corporate-tax-base-ccctb_en extracted 05.12.2018).

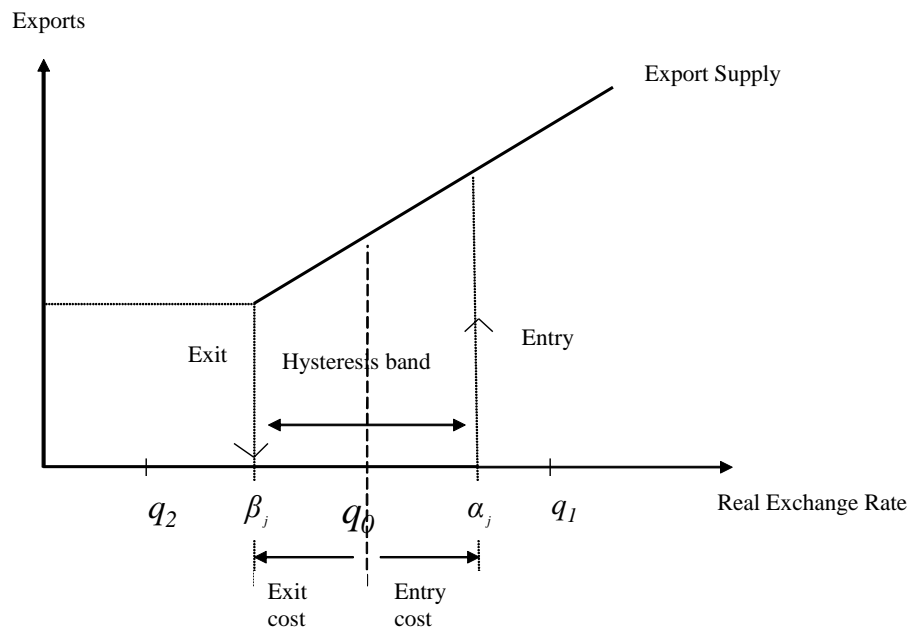


Figure 2 - The non-linear export supply curve

Source: Baldwin and Krugman (1989), p. 641.

The export hysteresis framework, where effects of past exchange rate values remain in current export volumes (Baldwin & Krugman, 1989), claims that firms are faced with sunk market entry costs, including costs of packaging, upgrading of product quality, establishing export market channels and accumulating information on-demand sources (Gimede, 2004, p.380).

Trade costs differ between both industries and countries, but in one way or another, smaller firms bear higher costs for (market) information (Gimede, 2004, p. 387). This makes the non-linear export supply curve relevant to SMEs' export behavior, a feature that is not given sufficient attention in the literature.

Higher entry cost makes internationalization problematic for SMEs, and the higher the entry costs, the wider is the hysteresis band (Borgersen, 2006). The hysteresis band complicates the entry into foreign markets and makes it harder to leave once having entered. The entry cost also distinguished profitability between potential SME exporters and already established SME exporters (Borgersen, 2005). The hysteresis band is also related to the two aspects discussed below. The degree of exchange rate pass-through and hedging of exchange rate risk might impact the fluctuations in income, thus the probability of remaining as an exporter once having entered.

SMEs Pricing of Exports and Exchange Rate Pass-Through

Determining the price of products and services can be challenging when firms operate overseas. The strategy for determining price should be taken into account when formulating a strategy for moving overseas (Ensari & Karabay, 2014). The literature on exchange rate pass-through (ERPT) investigates the relationship between exchange rates and industry characteristics such as the nature of competition and market structure (P. K. Goldberg & Knetter, 1997; Menon, 1995).

In perfectly integrated markets, the law of one price (LOP) is argued to hold. Therefore, in the absolute type of LOP, identical products should have the same price in perfectly integrated markets (P. K. Goldberg & Knetter,

1997). The relative version of LOP, where transportation costs are included, allows for a constant price wedge between identical products. ERPT is complete in the absolute LOP, while less than thorough in the relative version of LOP, but consistent in both frameworks. As SMEs often produce differentiated goods and are engaged in niche-markets (Moen, 2000)⁵, LOP arguments might be less relevant for SMEs ERPT.⁶

A price response to changes in nominal exchange rates that might be more relevant for SMEs may be found in flexible or sticky price imperfect competition models.⁷ Dornbusch (1987) identifies four variables potentially affecting the degree of pass-through to destination currency import prices, including (i) the level of market segmentation, (ii) the level of product differentiation, (iii) the functional form of the demand curve, and (iv) the market structure and degree of strategic interaction among suppliers. This approach complicates ERPT compared to LOP-strategies and makes it context-specific.

According to Dixit and Stiglitz's (1977) monopolistic competition model, the optimal price is a constant mark-up over marginal cost. The mark-up is inversely related to the elasticity of demand. Dixit and Stiglitz argue for an import price response proportional to the change in the nominal exchange rate and that ERPT is complete when the elasticity of demand is constant. On the other hand, Krugman (1986) finds pass-through to be incomplete in monopolistic competition and introduced the 'pricing-to-market' concept.

Starting from a Cournot model with foreign and domestic firms, Dornbusch (1987) explains the relationship between ERPT and market structure. Dornbusch observes incomplete ERPT and found the pass-through elasticity ε to be positively related to the number of foreign firms to total firms in a market n^*/N , in addition to market concentration $\frac{ew^*}{P}$. (The nominal exchange rate is expressed by e , the domestic currency price level by P while w^* is foreign wage cost).

$$\varepsilon = \frac{n^*}{N} \frac{ew^*}{P}$$

Krugman (1986) also points out that a dynamic model of imperfect competition is necessary to explain pricing-to-market and ERPT. Studying a two-period duopoly, Froot, and Klemperer (1989), for instance, argue that a firm's market share in the first period matters for the demand it faces in the second period. According to the model, the expected future exchange rate influences the market share in the second period and the optimal first-period price. Froot and Klemperer also relate ERPT to whether changes in exchange rates are temporary or permanent.

Kasa (1992) argues, as Froot and Klemperer (1989), that a factor critical for ERPT is the relative importance of the transitory component of exchange rate fluctuations. A low pass-through may be the result of exchange rate changes perceived to be transitory. When distinguishing between temporary and permanent exchange rate shocks, firms' planning horizon is brought to the table. Both agency theory and transaction cost theory is used

⁵ Moen (2000) argues SMEs' export strategy targets niche markets to overcome their size disadvantage. See also OECD (2004) or the interesting Trade forum discussion <http://www.tradeforum.org/article/a-strategic-approach-to-sme-export-growth/>

⁶ See Borgersen (2011) for a discussion related to the internationalization and exchange rate challenges of SMEs in developing economies.

⁷ Sticky prices are related to menu-costs, costs that might be higher in international compared to domestic markets. When price strategies are time-dependant, the real effects of exchange rate shocks might be substantial and by far exceed the consequences of the same strategy in domestic markets. Results from state-dependant rules might be more equal to domestic markets. See e.g. Mankiw (1985) for a classic approach to menu costs.

to highlight the role of ownership structure (McConaughy, Walker, Henderson, & Mishra, 1998). As many SMEs are family-owned, the planning horizon might differ from that of large listed firms, requiring shorter horizons to satisfy investor requirements.⁸

The role of the planning horizon in ERPT might be seen from Borgersen (Borgersen, 2007). Highlighting the exporters' planning horizon, the paper derives an intertemporal pricing rule for exports, which might illustrate the distinction between ERPT among SMEs and more significant listed exporters.⁹ The export price in domestic currency P_t^* is linked to the permanent value of the exchange rate \tilde{e} , but where one also allows for short-run exchange rate deviations $(\tilde{e}_t - e_t)$.¹⁰

$$(2) \quad P_t^* = \theta e_t + \theta(\tilde{e}_t - e_t)$$

Expression (1) gives an exporter the pricing rule with a long horizon, which we here assume to be an SME. We compare this to a short-run pricing rule $P_t^* = \theta e_t$ (the first term of expression 2), which represents a static (period-by-period) mark-up rule that governs pricing among exporters with shorter horizons, in this case, more significant exporters.

In the case of a temporary shock to the exchange rate, α is the permanent value of the exchange rate affected $\frac{\delta \tilde{e}_t}{\delta \alpha}$, but the effect on the permanent value that falls short of that on the current value of the exchange rate is $\frac{\delta e_t}{\delta \alpha} (\frac{\delta \tilde{e}_t}{\delta \alpha} < \frac{\delta e_t}{\delta \alpha})$. It follows thus directly from the two pricing rules, as the effect on the static mark-up rule $\frac{\delta P_t}{\delta e_t} = \theta$ exceeds the effect on the intertemporal pricing rule $\frac{\delta P_t^*}{\delta e_t} = \theta \frac{\delta \tilde{e}_t}{\delta e_t}$, that a temporary exchange rate shock affects SMEs pricing less than the pricing of bigger exporters with a short-run pricing rule $\frac{\delta P_t}{\delta e_t} > \frac{\delta P_t^*}{\delta e_t}$. Differences in planning horizons, for instance, differences in ownership structure, might produce different ERPT and different exposure to the exchange rate risk of exporters of various sizes.

Even so, the 'hysteresis models' of Baldwin and Krugman (1989) discussed earlier emphasize another dynamic supply-side effect on ERPT in industries with SMEs. Large exchange rate shocks might, in contrast to smaller shocks, induce entry (or exit) and alter market structures and change competition and impact ERPT. From expression (1), we see how the entry of foreign firms n^* Changes the pass-through elasticity in a market. If market entry costs are higher in niche-markets, the hysteresis band pictured in Figure (2) is broader, and more massive shocks are necessary for stimulating entry (or exit). This makes ERPT smaller in niche markets than markets with mass-production dominated by large exporters for most sized exchange rate shocks.

SMEs Hedging of Exchange Rate Risk

As SMEs enter foreign markets, new opportunities arise. Internationalization, however, also exposes SMEs to exchange rate risk (Bartram, 2008; Bartram, Brown, & Minton, 2010) for the basics of exchange rate risk).¹¹ Over the last decades, large and persistent fluctuations in exchange rates have been a significant risk for companies worldwide, particularly for firms with foreign currency-based activities such as imports and exports

⁸ See, for instance, Lee (2004) for family owned SMEs. Lee (2004) argues for a positive influence of family ownership on cost efficiency and return on investments.

⁹ See Borgersen (2008), p. 13.

¹⁰ The exchange rate pass-through parameter θ might encompass both LOP-frameworks ($\theta = 1$ (*absolute LOP*) and $\theta < 1$ (*relative LOP*)) as well as pricing to market ($\theta < 1$) reasoning.

¹¹ See e.g. Garner and Shapiro (1984) for a practical method of assessing foreign exchange rate risk.

(Álvarez-Díez, Alfaro-Cid, & Fernández-Blanco, 2016). Increased exchange rate risk might hamper SMEs' internationalization abilities. Foreign exchange risk is associated with unexpected changes in exchange rates (Bartram et al., 2010). Hedging against such risk implies seeking insurance against these risks either through internal or external hedging. As FX hedging might take different forms and vary across both intensity and structure, SMEs' management of exchange rate risk contains several essential aspects.

The pricing rule above allows for an illustration of how exchange rate fluctuations impact export market profitability and how such changes may hamper internationalization. Assuming an exporter enters a foreign market (let us say the US) where the market price per unit is 10 US\$, and the exchange rate (the domestic price of US\$) equals 7, the domestic currency per unit income from exports is equal to 70 in domestic currency. An appreciation of the domestic currency from 7 to 5 reduces domestic currency income per unit of exports to 50. Hence, even if the US's market price is unaffected, the appreciation reduces domestic currency income per unit of exports by 28 percent. If such events occur frequently, foreign market operations become troublesome. In contrast, efforts to hedge against such shocks' consequences might help – or be a prerequisite – for foreign market operations.

Dominguez and Tesar (2006) describe a significant level of foreign exchange exposure among small exporters. Figure 1 may argue that transaction risk is the most prominent type of exchange rate risk for SMEs operating in the first internationalization stages. However, focusing on exporters' location relative to funding sources and second-hand markets for capital, Borgersen (Borgersen, 2016) also bridges the gap concerning translation risk for exporting SMEs.

Yeo and Lai (2004) support Dominguez and Tesar (K. M. Dominguez & Tesar, 2006) and argue that SMEs suffer a greater exchange rate risk than more prominent exporters. Williamson, Griffin and Doidge (2002) discuss the opposite, as (i) SMEs tend to operate in markets with inelastic demand while large firms tend to operate in more price-sensitive markets, and (ii) stock prices of SMEs (when listed) are less affected than those of big firms due to information asymmetries, where fewer investors understand the exchange rate exposure of SMEs.

There are several strategies SMEs may use to manage their risk exposure. Both the use of derivatives such as forward contracts, futures contracts, swaps, and natural hedges (Ehrlich & Anandarajan, 2008; S. R. Goldberg & Drogot, 2008), or operational strategies are available.

Hedging does not cost-free, and the hedging decision should be rooted in a cost-benefit framework. In the context of perfect capital markets, hedging does not add value, and the arguments for hedging must be found in various types of capital market imperfections. The cost of financial distress (Hagelin, 2003), under investments (Muller & Verschoor, 2006), and tax liabilities (Smith & Stulz, 1985) are conventional arguments in favor of hedging.¹² Froot, Scharfstein, and Stein (1993) extended Smith and Stulz (1985) to a framework relevant for SMEs, where external funding is more costly than internal funding when arguing the gains of hedging.

Pennings and Garcia (2004) argue that it is not common among SMEs to use derivatives to hedge risk. SMEs' lack of interest in FX hedging might at first glance be surprising, given that SMEs are often considered high-risk firms (Marshall, Kemmitt, & Pinto, 2013) and that many of the characteristics of SMEs, such as the high risk of financial distress and underinvestment, are closely tied to the advantages of hedging. In an internationalisation context, the underinvestment argument is, for instance, highly under-communicated. The market entry cost argument discussed earlier decides to enter foreign markets an investment decision. The lack

¹² There is a contribution to the discussion of hedging and tax incentives by Graham and Rodgers (2002).

of internationalisation among SMEs is thus an underinvestment issue, where hedging might help improve efficiency and bring value-added.

Döhring (2008) classifies hedging designs as given by Table 1. While financial hedges comprise derivatives and foreign currency borrowing, operational hedges refer to the geographical diversification of production, sourcing, and sales.¹³ Foreign currency borrowing is part of what is referred to as a natural hedge, not an operational hedge.¹⁴

Table 1 - Classification of hedging instruments

Classification in hedging literature	Financial hedges		Operational hedges
Classification in financial statements	Derivative hedges	Natural hedges	
Examples	Forwards (futures), options, swaps	Foreign-currency debt	Diversification across currency zones, operational matching of revenues and expenditures

Source: Döhring (2008), p. 5.

Different hedging strategies have other (dis)advantages. Several types of financial instruments might be used to hedge currency risk. Advocating which type of instruments are favorable to SMEs, once having decided to hedge exchange rate risk, is complex and involves several features. When comparing, for instance, forwards and futures, the former might be tailor-made while the latter is standardized. The former type of instrument may, at the same time, require payments of higher premiums and lack tailor-made construction (Ehrlich & Anandarajan, 2008). A tailor-made contract is more expensive than a standard contract and less liquid, which may constrain SMEs' ability to hedge exchange rate risk and ultimately hamper their successful entrance - and operation - in foreign markets. In the presence of relationship lending, this pricing aspect might be even more vital if derivatives are relatively unfamiliar territory for the smaller banks. Irrespective of the price of hedging, in a cost-based pricing regime, the hedging cost should be incurred in export price. Goldberg and Drogot (2008) argue for the inefficiency of forward rate strategies if payment dates differ from maturity, although as a hedging strategy, that thus might be costly.

In general, the relationship between hedging and firm size is ambiguous.¹⁵ Some tentative arguments might, however, be made, especially for financial hedges. Chan-Lau (2005) argues forwards to be less available to SMEs due to counterparty risk. Jonuska and Samenaite (2003) discuss derivatives to be too costly for many firms, especially SMEs. Graham and Rodgers (2002) also argue that hedging increases with firm size and that SMEs, due to high fixed costs, fail to set up a hedging program. Hagelin (2003) also argues that financial instruments are unaffordable for small firms and finds that firms hedge transaction risk.

Moreover, he claims firms with (i) high human capital investments and (ii) lower institutional ownership are more frequently hedging transaction exposures. However, the paper argues that the hedging intensity of firms

¹³ Allayannis, Ihrig and Weston (2001) discuss financial and operational strategies for exchange rate hedging. There are also several studies that provide empirical support for hedging (see e.g. Moosa (2004) and the references therein).

¹⁴ See Döhring (2008) for a discussion. In the following, we focus mainly on SMEs' use of financial hedges.

¹⁵ Firms may hedge for a number of reasons, although no real agreement on hedgers outperforming non-hedgers seems to exist (see e.g. Allayannis et al., (2001). Thinking in terms of what to hedge, there seems to be agreement that short-term fluctuations in exchange rates may be hedged at little difficulty, while long-term movements are more serious (Brookes et al. 2000).

increases with market-to-book ratio, the share of foreign currency revenues, and the degree of human capital. The effect of institutional ownership does not factor in the characterization of SMEs. Pennings and Garcia (2004) investigate SMEs' hedging behavior and argue that firm size, risk exposure, and financial structure matter for the use of derivatives. Besides, the decision-making unit, manager's risk attitude, risk perception, and education level play essential roles in explaining SMEs' derivative usage (Pennings & Garcia, 2004, p.972).

The general wisdom in academic circles is that large banks are uninterested in SMEs (de la Torre, Martínez Pería, & Schmukler, 2010). This argument underlies policy programs favoring special funding assistance to SMEs.¹⁶ De la Torre et al., (2010) relates the factors hampering SME financing to "opaqueness," i.e., that it is difficult to ascertain if firms can pay (have viable projects) and willingness to pay (due to moral hazard). A potential solution to this "opaqueness" is relationship lending, where banks rely on loan officers' soft information through continuous and personalized contacts with SMEs. In this case, it might be natural that larger banks are less prone to fund SMEs. If internationalization makes it necessary for SMEs to move beyond relationship lending, due to capacity or market knowledge among smaller banks, financial hedges' availability might be limited.

However, de la Torre et al. (2010) continue by arguing that banks are interested in helping supply SMEs with funding due to (i) reduced interest rate margins in standardized sectors and the fact that (ii) lending is a part of the overall package banks provide to SMEs. This package includes several different services (fee-based non-lending services). Banks are increasingly applying transaction technologies that facilitate arm-length lending, such as credit scoring and risk-rating tools, which allow for SME funding. The availability of financial hedging tools might thus improve over time.

Operational hedging is an integral part of firms hedging; one might argue that it is the cornerstone of hedging. However, operational hedging is resource-demanding and might be troublesome for SMEs where administrative resources are constrained. Gao, Sung, and Zhang (2012) argue that SMEs lack formal methods for risk management, supporting internal hedging techniques. Due to limited resources, SMEs may resort to internal hedging and be unaware of the nature of external hedging techniques (Kula, 2005). McCarthy (1999; 2003) argue that operational hedges are a very cost-intensive hedging strategy, almost unattainable for small firms. McCarthy (1999) claims operational risk to be challenging to quantify and, when exchange rates come into play, even complex for SMEs to handle. Boyabatli and Tokay (2004) claim that operational hedging creates a long-term hedge that favors internationalization but that operational hedges require higher capital investment levels than financial hedges and are therefore even less available to SMEs. Irrespective of firm size, managerial risk attitude is essential for hedging per se and the hedging strategy (Smith & Stulz, 1985).

Discussion

The degree of competition, the distinction between niche and mass production, and the extent of product differentiation might contribute to variations in ERPT across firm size due to different strategies in managing exchange rate risk. SMEs are often engaged in niche-production with the scarce competition, allowing for more substantial pass-through than markets where more prominent exporters compete over market-shares. Inelastic demand, however, pulls ERPT in the other direction. Lack of management competence and internal resource constraints might hamper SMEs' ability to apply ERPT rules and properly manage exchange rate risk in the first place.

The link between an exporter and its funding sources is relevant for how SMEs manage exchange rate risk. For SMEs, relationship banking is essential, as their relation to financial markets is weaker. The ability to borrow in

¹⁶ See CFA (2013) or OECD (2018) for the basic principles.

the same (foreign) market in which it operates produces different ERPT among more prominent exporters than SMEs, relying on domestic market funding. Naturally, the paper focuses on SMEs' transaction risk, leaving both translation and economic risk aside. Relationship lending, and the role of SME location relative to funding sources, bring both types of exchange rate risk into the picture. This is valid both when discussing pricing and in terms of SMEs' hedging of exchange rate risk and how to manage the two.

In a cost-based pricing strategy, the cost of hedging should be included in the foreign market pricing rule. The decision of whether or not to hedge FX risk can be related to a cost-benefit assessment. The benefits associated with reduced variations in foreign market income must be weighed against the cost of hedging. The cost includes both the purchasing price of hedging instruments and the internal costs of analyzing and deciding on relevant risk. In the case of operational hedging, the costs of any internal adjustment related to this operational hedge should be included. Some argue that operational hedging is unavailable to SMEs due to high internal costs. Insufficient management capacity is discussed to deter SME hedging in general, both operational and external hedging.

If entering an international market makes it necessary to move beyond relationship lending, external hedging costs might be too high for SMEs. Market availability might also play a role. While forwards seem a natural instrument for tailor-made FX-hedging and are particularly useful for marginal foreign market exposure at the beginning of the internationalization process, such instruments are more expensive than futures. The choice between such tailor-made and standard instruments for managing exchange rate risk might be crucial for SMEs' ability to operate successfully in international markets. The option might increase the cost of hedging and the export price in the case of a cost-based pricing strategy.

Conclusion

The exchange rate represents a challenge for firms entering international markets, irrespective of firm size. Of course, both the type of challenge and how to manage such challenges might vary according to firm size. This paper reflects how SMEs manage their exchange rate challenges and benchmarks the reflections on SMEs' management of exchange rate risk to the textbook description of how big(ger) exporters manage the exchange rate challenges they face in international markets. Two aspects of the exchange rate challenges are addressed: exchange rate pass-through (ERPT) and FX-hedging.

Several factors impact SMEs ERPT; ownership structure, management characteristics, and the use of domestic funding sources might all impact SMEs ERPT. The family dominated ownership structure might allow for longer planning horizons among SMEs. A longer planning horizon might include a management strategy where temporary exchange rate shocks are passed-through to export prices differently among family-owned SMEs. When pricing is linked to permanent exchange rates, temporary shocks and current exchange rates might be a more relevant pass-through component for listed firms – or SMEs with other ownership structures. However, for financially constrained SMEs, pricing rules might still be linked to current exchange rates when the management of exchange rate risk has a shorter-term focus.

The combination of weak hedging possibilities, and ambiguous arguments regarding how firm size affects ERPT, complicates internationalization among SMEs. The entry costs associated with foreign market operations allow hedging a dual role, affecting foreign market operations and foreign market entry in the first place. As foreign market entry costs make internationalization an investment decision, the lack of hedging makes SMEs easily underinvest in international markets. A proper hedging strategy might help SMEs overcome this inefficiency. Managing exchange rate risk properly might therefore be a prerequisite for successful internationalization among SMEs

Funding: This research received no external funding.

Acknowledgments: we thank and acknowledge two anonymous reviewers and the editor for useful comments.

Conflicts of Interest: The authors declare no conflict of interest.

References

- Achterberg, L. H., Omar, M., Ambituuni, A., & Roll, O. (2018). Facts or gut feelings: analysis of external pricing antecedents for SMEs in Germany. *Journal of Small Business and Enterprise Development*, 25(6), 886-901. doi: [doi:10.1108/JSBED-12-2017-0398](https://doi.org/10.1108/JSBED-12-2017-0398)
- Allayannis, G., Ihrig, J., & Weston, J. P. (2001). Exchange-rate hedging: Financial versus operational strategies. *American Economic Review*, 91(2), 391-395.
- Álvarez-Díez, S., Alfaro-Cid, E., & Fernández-Blanco, M. O. (2016). Hedging foreign exchange rate risk: Multi-currency diversification. *European Journal of Management and Business Economics*, 25(1), 2-7. doi: <https://doi.org/10.1016/j.redde.2015.11.003>
- Amiti, M., Itskhoki, O., & Konings, J. (2014). Importers, Exporters and Exchange Rate Disconnect *American Economic Review*, 104(7), 1942-1978.
- Baldwin, R., & Krugman, P. (1989). Persistent Trade Effects of Large Exchange Rate Shocks. *The Quarterly Journal of Economics*, 104(4), 635-654. doi: [10.2307/2937860](https://doi.org/10.2307/2937860)
- Bartram, S. M. (2008). What lies beneath: Foreign exchange rate exposure, hedging and cash flows. *Journal of Banking & Finance*, 32(8), 1508-1521. doi: <https://doi.org/10.1016/j.jbankfin.2007.07.013>
- Bartram, S. M., Brown, G. W., & Minton, B. A. (2010). Resolving the exposure puzzle: The many facets of exchange rate exposure. *Journal of Financial Economics*, 95(2), 148-173. doi: <https://doi.org/10.1016/j.jfineco.2009.09.002>
- Bell, J., Crick, D., & Young, S. (2004). Small Firm Internationalization and Business Strategy: An Exploratory Study of 'Knowledge-Intensive' and 'Traditional' Manufacturing Firms in the UK. *International Small Business Journal*, 22(1), 23-56. doi: [10.1177/0266242604039479](https://doi.org/10.1177/0266242604039479)
- Bell, J., McNaughton, R., Young, S., & Crick, D. (2003). Towards an Integrative Model of Small Firm Internationalisation. *Journal of International Entrepreneurship*, 1(4), 339-362. doi: [10.1023/A:1025629424041](https://doi.org/10.1023/A:1025629424041)
- Borgersen, T. A. (2005). SMEs in Developing Countries and the Problem of Exporting: Market Entry Costs, Exchange Rate Shocks and the Capital Structure of Firms. *Journal of African Policy Studies*, 10(1), 87-109.
- Borgersen, T. A. (2006). When Experience Matters: The Export Performance of Developing Countries' SMEs. *Journal of Sustainable Development in Africa*, 8(1), 106-118.
- Borgersen, T. A. (2007). Pricing of exports: exchange rate pass-through and the planning horizon of firms. *Global Business and Economics Review*, 9(1), 8-18.
- Borgersen, T. A. (2016). The Exchange Rate Response of Credit-Constrained Exporters: The Role of Location. *Theoretical Economics Letters*, 6(5), 927-941.
- Bose, T. K. (2016). Critical Success Factors of SME Internationalization. *Journal of Small Business Strategy*, 26(2), 87-109.
- Boyabatli, O., & Toktay, L. B. (2004). *Operational Hedging: A Review with Discussion*.
- Chan-Lau, J. A. (2005). Hedging Foreign Exchange Risk in Chile: Markets and Instruments: International Monetary Fund, IMF Working Paper 05/37.
- Clercq, D. D., Sapienza, H. J., & Crijns, H. (2005). The Internationalization of Small and Medium-Sized Firms. *Small Business Economics*, 24(4), 409-419. doi: [10.1007/s11187-005-5333-x](https://doi.org/10.1007/s11187-005-5333-x)
- de la Torre, A., Martínez Pería, M. S., & Schmukler, S. L. (2010). Bank involvement with SMEs: Beyond relationship lending. *Journal of Banking & Finance*, 34(9), 2280-2293. doi: <https://doi.org/10.1016/j.jbankfin.2010.02.014>



- Döhring, B. (2008). Hedging and invoicing strategies to reduce exchange rate exposure - a euro-area perspective (Vol. 299): Directorate General Economic and Financial Affairs (DG ECFIN), European Commission.
- Dominguez, K. M., & Tesar, L. L. (2006). Exchange rate exposure. *Journal of International Economics*, 68(1), 188-218.
- Dominguez, N., & Mayrhofer, U. (2017). Internationalization stages of traditional SMEs: Increasing, decreasing and re-increasing commitment to foreign markets. *International Business Review*, 26(6), 1051-1063. doi: <https://doi.org/10.1016/j.ibusrev.2017.03.010>
- Dornbusch, R. (1987). Exchange Rates and Prices. *The American Economic Review*, 77(1), 93-106.
- Ehrlich, M., & Anandarajan, A. (2008). Managing financial risk. *Journal of Corporate Accounting and Finance*, 19(6), 25-34.
- Ensari, M. Ş., & Karabay, M. E. (2014). What Helps to Make SMEs Successful in Global Markets? *Procedia - Social and Behavioral Sciences*, 150, 192-201. doi: <https://doi.org/10.1016/j.sbspro.2014.09.030>
- Fernández, Z., & Nieto, M. J. (2005). Internationalization Strategy of Small and Medium-Sized Family Businesses: Some Influential Factors. *Family Business Review*, 18(1), 77-89. doi: 10.1111/j.1741-6248.2005.00031.x
- Froot, K. A., & Klemperer, P. D. (1989). Exchange Rate Pass-Through When Market Share Matters. *The American Economic Review*, 79(4), 637-654.
- FROOT, K. A., SCHARFSTEIN, D. S., & STEIN, J. C. (1993). Risk Management: Coordinating Corporate Investment and Financing Policies. *The Journal of Finance*, 48(5), 1629-1658. doi: <https://doi.org/10.1111/j.1540-6261.1993.tb05123.x>
- Gao, S. S., Sung, M. C., & Zhang, J. (2012). Risk management capability building in SMEs: A social capital perspective. *International Small Business Journal*, 31(6), 677-700. doi: 10.1177/0266242611431094
- Garner, C. K., & Shapiro, A. C. (1984). A practical method of assessing foreign exchange rate risk. *Midland Corporate Finance Journal*, 6-17.
- Gimede, V. (2004). Export Propensities and Intensities of Small and Medium Manufacturing Enterprises in South Africa. *Small Business Economics*, 22(5), 379-389. doi: 10.1023/B:SBEJ.0000022212.08739.54
- Goldberg, P. K., & Knetter, M. M. (1997). Goods Prices and Exchange Rates: What Have We Learned? *Journal of Economic Literature*, 35(3), 1243-1272.
- Goldberg, S. R., & Drog, E. L. (2008). Managing Foreign Exchange Risk. *Journal of Corporate Accounting & Finance*, 19(2), 49-57. doi: <https://doi.org/10.1002/jcaf.20373>
- Graham, J. R., & Rogers, D. A. (2002). Do Firms Hedge in Response to Tax Incentives? *The Journal of Finance*, 57(2), 815-839. doi: <https://doi.org/10.1111/1540-6261.00443>
- Hagelin, N. (2003). Why firms hedge with currency derivatives: an examination of transaction and translation exposure. *Applied Financial Economics*, 13(1), 55-69. doi: 10.1080/09603100110094501
- Johanson, J., & Vahlne, J.-E. (2009). The Uppsala internationalization process model revisited: From liability of foreignness to liability of outsidership. *Journal of International Business Studies*, 40(9), 1411-1431. doi: 10.1057/jibs.2009.24
- Johanson, J., & Vahlne, J. E. (1990). The Mechanism of Internationalisation. *International Marketing Review*, 7(4). doi: 10.1108/02651339010137414
- Jonuska, M., & Samenaite, I. E. (2003). Foreign Exchange Risk Management in Lithuanian Companies: The use of currency derivatives: SSE Riga Working Papers. The Stockholm School of Economics in Riga.
- Kalinic, I., & Forza, C. (2012). Rapid internationalization of traditional SMEs: Between gradualist models and born globals. *International Business Review*, 21(4), 694-707. doi: <https://doi.org/10.1016/j.ibusrev.2011.08.002>
- Kasa, K. (1992). Adjustment costs and pricing-to-market theory and evidence. *Journal of International Economics*, 32(1), 1-30. doi: [https://doi.org/10.1016/0022-1996\(92\)90034-H](https://doi.org/10.1016/0022-1996(92)90034-H)

- Katie, R. (2017). 11 Biggest Challenges of International Business in 2017
- Krugman, P. (1986). Pricing to Market when the Exchange Rate Changes (Vol. 1926): National Bureau of Economic Research, Inc.
- Kula, V. (2005). Foreign Exchange Exposure Perception and Management of Turkish SMEs. *Journal of Small Business & Entrepreneurship*, 18(4), 437-452. doi: 10.1080/08276331.2005.10593352
- Kunday, Ö., & Şengüler, E. P. (2015). A Study on Factors Affecting the Internationalization Process of Small and Medium Enterprises (SMEs). *Procedia - Social and Behavioral Sciences*, 195, 972-981. doi: <https://doi.org/10.1016/j.sbspro.2015.06.363>
- Langseth, H., O'Dwyer, M., & Arpa, C. (2016). Forces influencing the speed of internationalisation: An exploratory Norwegian and Irish study. *Journal of Small Business and Enterprise Development*, 23(1), 122-148. doi: doi:10.1108/JSBED-10-2013-0155
- Lee, J. (2004). The effects of family ownership and management on firm performance. *SAM Advanced Management Journal*, 69, 46-52.
- Mankiw, N. G. (1985). Small Menu Costs and Large Business Cycles: A Macroeconomic Model of Monopoly. *The Quarterly Journal of Economics*, 100(2), 529-538.
- Marshall, A., Kemmitt, M., & Pinto, H. (2013). The determinants of foreign exchange hedging in Alternative Investment Market firms. *The European Journal of Finance*, 19(2), 89-111. doi: 10.1080/1351847X.2012.659267
- McCarthy, S. (1999). Foreign Exchange Transaction Exposure Management Practices of Australian SMEs: An exploratory analysis. *Small Enterprise Research*, 7(2), 29-42. doi: 10.5172/ser.7.2.29
- McCarthy, S. (2003). Hedging versus not hedging. Strategies for managing foreign exchange transaction exposure: Working Paper 315, Queensland University of Technology, 1-12. https://eprints.qut.edu.au/315/1/WP_McCarthy_Hedging.pdf.
- McConaughy, D. L., Walker, M. C., Henderson, G. V., & Mishra, C. S. (1998). Founding family controlled firms: Efficiency and value. *Review of Financial Economics*, 7(1), 1-19. doi: [https://doi.org/10.1016/S1058-3300\(99\)80142-6](https://doi.org/10.1016/S1058-3300(99)80142-6)
- Meissner, H. G., & Gerber, S. (1980). Die Auslandsinvestition als Entscheidungsproblem. *Betriebswirtschaftliche Forschung und Praxis : BFuP. - Bochum. Vol. 32 (3), p. 217-228.*
- Menon, J. (1995). Exchange rate pass-through. *Journal of Economic Surveys*, 9(2), 197-231. doi: <https://doi.org/10.1111/j.1467-6419.1995.tb00114.x>
- Moen, Ø. (2000). SMEs and International Marketing. *Journal of Global Marketing*, 13(4), 7-28. doi: 10.1300/J042v13n04_02
- Muller, A., & Verschoor, W. F. C. (2006). Foreign exchange risk exposure: Survey and suggestions. *Journal of Multinational Financial Management*, 16(4), 385-410. doi: <https://doi.org/10.1016/j.mulfin.2005.09.001>
- OECD. (2004). Promoting Entrepreneurship and innovative SMEs in a global economy. Towards a more responsible and inclusive globalisation: <https://www.oecd.org/industry/smes/31919223.pdf>.
- OECD. (2018). G20/OECD Effective Approaches for Implementing the G20/OECD High-Level Principles on SME Financing <http://www.oecd.org/g20/Effective-Approaches-for-Implementing-HL-Principles-on-SME-Financing-OECD.pdf>.
- Oviatt, B. M., & McDougall, P. P. (1994). Toward a Theory of International New Ventures. *Journal of International Business Studies*, 25(1), 45-64.
- Oviatt, B. M., & McDougall, P. P. (2005). Defining International Entrepreneurship and Modeling the Speed of Internationalization. *Entrepreneurship Theory and Practice*, 29(5), 537-553. doi: 10.1111/j.1540-6520.2005.00097.x
- Pennings, J. M. E., & Garcia, P. (2004). Hedging behavior in small and medium-sized enterprises: The role of unobserved heterogeneity. *Journal of Banking & Finance*, 28(5), 951-978. doi: [https://doi.org/10.1016/S0378-4266\(03\)00046-3](https://doi.org/10.1016/S0378-4266(03)00046-3)

- Ruzzier, M., Hisrich Robert, D., & Antoncic, B. (2006). SME internationalization research: past, present, and future. *Journal of Small Business and Enterprise Development*, 13(4), 476-497. doi: 10.1108/14626000610705705
- Smith, C. W., & Stulz, R. M. (1985). The Determinants of Firms' Hedging Policies. *The Journal of Financial and Quantitative Analysis*, 20(4), 391-405. doi: 10.2307/2330757
- Stiglitz, J. E., & Dixit, A. K. (1977). Monopolistic Competition and Optimum Product Diversity. doi: 10.7916/D8S75S91
- Williamson, R. G., Griffin, J. M., & Doidge, C. (2002). Does Exchange Rate Exposure Matter? . Available at SSRN: <https://ssrn.com/abstract=313060> or <http://dx.doi.org/10.2139/ssrn.313060>.
- Yeo, K. T., & Lai, W. C. (2004). Risk Management Strategies for SME Investing in China: a Singaporean Perspective (pp. 794-798): IEMC2004, International Engineering Management Conference.

Web-based Seminar - New Source of Qualitative Study: Data Collection during the Pandemic of COVID-19

Wen Ni Tiong^{1*}, Anne Freda Sim Siaw Fen²

¹ Institute for Globally Distributed Open Research and Education (IGDORE), Malaysia

² University of Sunderland, Faculty of Business & Law, United Kingdom

* Corresponding author: wenni.tiong@igdore.org

Article History

Received 2020-10-12

Revised 2020-11-11

Accepted 2020-11-12

Published 2020-11-18

Keywords

Web based Seminar

Qualitative data

COVID 19

Technology adoption

How to cite?

Tiong, W. N., & Sim, A. F. S. F. (2020). *Web-based Seminar - New Source of Qualitative Data: Data Collection during the Pandemic of COVID-19*. *SEISENSE Journal of Management*, 3(6), 50-64. doi: 10.33215/sjom.v3i6.477

Copyright © 2020 The Author(s)



Abstract

Objective- This article aims to discuss the authors' own experience using a web-based seminar (webinar) as a new data collection method for a qualitative descriptive study on factors influencing digital banking adoption among potential users in Malaysia (Digital Banking Study).

Design - This will be the first study to gather information from industry players and public perception towards digital banking service using webinars, with evidence compared to the study's quantitative results.

Findings – Data derived from webinar sessions are consistent with the quantitative results, and the potential of its uses as a new research tool was discussed in detail. **Policy Implications-** The findings showed several practical implications that are potentially useful for researchers, academics, and business analysts to consider adopting webinar data as a new qualitative data collection method.

Originality - This study documents the supporting evidence of the potential use of webinars as a useful tool to collect quality observation data.

Introduction

World Health Organization (WHO) declared the COVID-19 pandemic in March 2020, a global outbreak caused by the alarming and perilous spread of the COVID-19 virus (World Health Organization, 2020). The rising international cases, including Malaysia, have imposed strict lockdown to curb the virus's spread. The Malaysian government has implemented cordon sanitaire, also known as Movement Control Order, as a preventive action in response to the COVID-19 pandemic on 18 March 2020. This order encompasses restrictions and sanctions on all inbound and outbound travels, the general prohibition of mass gatherings nationwide, closure of all public and private educational institutions, as well as all government and private organizations except those affiliated in essential services. These essential services include healthcare, banking, telecommunications, irrigation, energy, oil, gas, pharmacy, safety, food supply, postal, broadcasting, port, and amenities (Prime Minister's Office of Malaysia, 2020). This lockdown has made significant disruptions across various industries, primarily, where the halt of global travel has resulted in the drastic decline of international trade and economic performances, fallen shares, interruption in the supply chain, production and manufacturing, human resource management, job losses, bankruptcies, as well as social ramifications (Carnevale & Hatak, 2020). Additionally, it has also affected academic activities with the closure of schools and educational institutions and has dramatically challenged the education sector, including the students, parents, and educators (Kapasias et al., 2020).

When the pandemic hit in the early year 2020, the obstacles of collecting sufficient and quality data have inspired us to seek other alternative other than the traditional way to collect more research data. "The Digital Banking Study" study was proposed in the beginning of pandemic to investigate the factors influencing user behavior to adopt digital banking services in Malaysia through the integration of the extended technology adoption model (TAM) and innovation diffusion theory (IDT). TAM, developed from the Theory of Reasoned Action (TRA), incorporates the perspective of behavioral science into perceived usefulness and perceived ease of use is one of the most widely used models in the field of information technology adoption research (Davis, 1986; Venkatesh & Bala, 2008; Zhang, 2018). However, despite its widespread use, TAM is insufficient to explain voluntary user acceptance of new technology in mobile banking (Xiong, 2013). To let us see more aspects of the possible factors that could influence the adoption of digital banking services, it is also important to understand the role of innovation in adopting adoption. The rate of adoption of an information technology product or service can be defined as "the relative speed with which members of a social system adopt an innovation" (Rogers, 1995). The digital banking services is currently in its infancy stage in Malaysia, thus motivates us to explore the individual adoption behavior from multiple aspects through the integration of TAM and IDT theories.

To obtain diverse opinions and comments from the industry players, the Digital Banking Study emphasizes the uses of triangulation methods by incorporating quantitative and qualitative data functions. As an extension of the Digital Banking Study, this paper focuses on the experts' opinion on their perception of the challenges, opportunities, and consumers' acceptance of digital banking services to establish vigorous discussion and interpretation of empirical analysis findings. Therefore, Digital Banking Study proposed using web-seminar (webinar) as a new data collection source to avoid disruption of obtaining quality research data even during a pandemic. This method is aligned with the global education establishments' demand to innovate and adapt to new learning methods in a short timeframe by United Nations as the pandemic continues (United Nations, 2020). These approaches include embracing digital technology either through online services or information-sharing platforms like Zoom, which has globalized connectivity (Donthu & Gustafsson, 2020). Additionally, the potential use of digital technologies as tools to meet the new standard practice in businesses and healthcare operations have also been studied (Papadopoulos et al., 2020; Webster, 2020).

Although the global trend of digitalization has transformed how education is designed, delivered, and implemented, there is a lack of evidence reports to show the efficacy of using webinar data as observation data

to add values to the research (Testers et al., 2015). In the author's opinion, a webinar that allows two-way communication between the host and audiences could be an ideal observational qualitative data source. This method enables the observation of presenters' facial expression as well as the collection of additional data through the 'Question and Answer (Q&A)' session at the end of the hosted webinar. In terms of popularity, Google Trend statistics have shown a whopping increase of 'Webinar' search item by 257.90% from March 2020 to July 2020. Concurrently, Zoom has recorded an increase of 169% in its Quarter 2 in 2020's revenue as the remote work trend continues (Yu, 2020).

Despite webinars' great uses, there are no articles that address qualitative research methodology via webinar to date. The use of webinars has been discussed as a useful tool for training, learning, and teaching purposes (Gegenfurtner & Ebner, 2019; Wang & Hsu, 2008). The empirical research examining webinars in training contexts, human resource development and adult education remains scarce (Gegenfurtner et al., 2020). No study has addressed the use of webinar as a tool for data collection. This paper's results could enrich the data and provide additional data to verify the qualitative findings from the Digital Banking Study published previously (Tiong, 2020). Through interpretive research philosophy, this paper discusses the potential use of webinars, including the preparation, challenges, advantages, disadvantages, and limitations of the webinar as a qualitative data collection tool based on the real-time experience during the conduct of the Digital Banking Study. As it is a relatively new technique to be mastered, it is necessary to understand this new methodology's process and design that could help today's researchers conduct useful qualitative data collection from webinars' widespread use. This paper will comprehend the benefits of obtaining qualitative data from webinars and expand the knowledge on sample collection methodology amidst the unprecedented pandemic challenges such as social distancing and wearing masks, which hinders face-to-face interaction in qualitative data collection. The findings could contribute to the knowledge that appeals to target segments such as educators, postgraduates, academic researchers, or business analysts, who intend to use this method to obtain data qualitatively.

Literature Review

The Digital Banking Study

As part of the digital transformation plan, the Central Bank of Malaysia (also known as Bank Negara Malaysia) has sketched the procedure to issue up to five digital banking licenses for the eligible operator to set up the first virtual bank in Malaysia. Little do we know the factors could influence potential Malaysian users to accept or reject this service before it becomes a reality. Hence, it prompts us to study the possible factors influencing users' perception of adopting digital banking services under the Digital Banking Study. The Digital Banking Study uses a conceptual research model developed based on TAM theories integrated with the IDT model (Figure 1).

TAM theories are commonly applied to study consumer attitudes and behaviors toward new technology adoption through understanding the impact of perceived ease of use and perceived usefulness (Marangunić & Granić, 2015), and social influence (K. J. Patel & Patel, 2018). Extended TAM was applied to study the acceptance of mobile payments (Dahlberg et al., 2003), online shopping (Gefen et al., 2003; Tong, 2010), mobile instant messaging (Jiang & Deng, 2011), e-commerce, and mobile commerce (Pavlou, 2003; Wei et al., 2009). Meanwhile, IDT explains how users adapt technological advances with five conceptually different factors that could influence the potential adopters' attitudes and intentions during the adoption process: relative advantage, complexity, compatibility, trialability, and observability (Rogers, 1995). The IDT has been used to predict customers' usage intention toward mobile payment adoption among Taiwanese consumers (Yeh, 2020), mobile banking adoption among the Indians (Dash et al., 2014) and Saudi Arabians (Al-Jabri & Sohail, 2012); as well as the adoption of internet banking services in Greece (Giovanis et al., 2012), Malaysia (Nor & Pearson, 2008) and rural South Africa (Ramavhona & Mokwena, 2016).

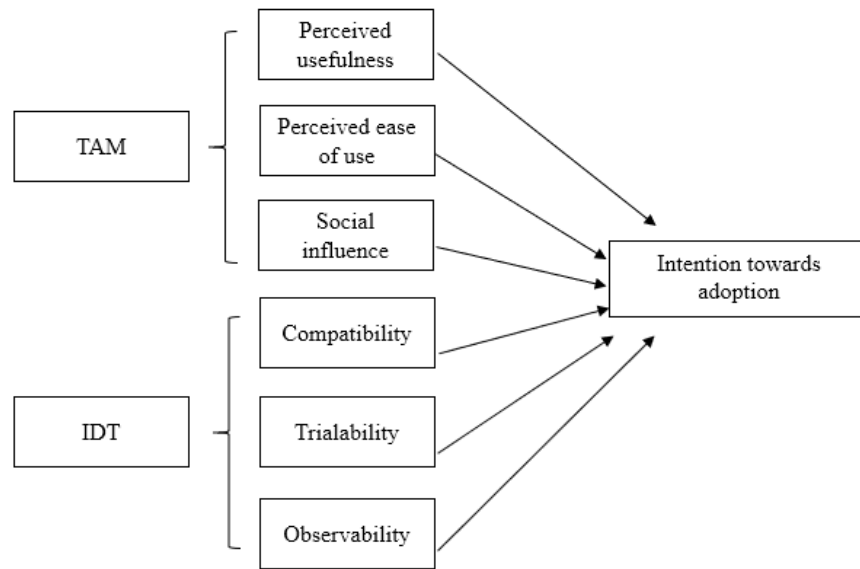


Figure 1 - Conceptual Framework proposed in the Digital Banking Study

Digital banking services and its development in Malaysia are actively discussed among industry players due to its potential for profit and revenue growth and the uncertainties that could be faced by the consumers and digital bank licensee contenders. Based on a business perspective, it would be vital to examine the steps taken by Malaysian banks, fintech, and start-ups in response to the country's competitive digital banking landscape and address the market demand that remains or capture the market. Nevertheless, focusing on the consumer perspective could provide information on the mechanism for potential users in respond to digital banking service in the current change in the digital technology and digital banking landscape in Malaysia. Both perspectives from industry players and consumers provide insight that could help identify a suitable marketing strategy and find the digital banking service or product's marketing edge.

Webinars for Education

Webinar is defined as a digital platform that combines web and seminar, which offers two-way communication for interactions and collaborations between hosts and participants across the world wide web (Verma & Singh, 2010). It is originated from the Computer-Mediated Communication (CMC) systems that can be synchronous (real-time) or asynchronous (delayed time) communication (Romiszowski & Mason, 1996; Wang & Hsu, 2008). CMC system has been an essential support to online learning. Its ability to transmit video, audio, and images enables users to share and exchange information in a real-time and two-way format (Kerr & Hiltz, 1982). Thus, webinar creates opportunities for educators and learners to experience different online interaction levels (Wang & Hsu, 2008).

Although practical webinar-session guidelines are useful for instruction to use webinars for education, educators and trainers need literatures that emphasizes research and examines the selection of appropriate webinar-related pedagogies (Anderson et al., 2006). The previous study has also suggested that teaching staff enthusiasm alone is insufficient to promote and integrate digital tools such as mobile technology within the teaching and learning sphere (Salavati, 2016). Another study also posits the importance of focus on pedagogy and its relevance in digital technology used to build digital confidence (Greener & Wakefield, 2015). A qualitative research was conducted to investigate pedagogical issues underlying the webinar tool in online learning and training which

discovered four chief techniques that are observation, open-ended survey, focus group and recorded webinar training sessions. The study has also shown the utilization of qualitative methods in examining the webinar's role as a two-way synchronous digital tool in online learning (Wang & Hsu, 2008).

Additionally, various discussions on the use of webinar as digital tool in educating medical trainees, such as on Core Surgical Training (CST) selection, provision of support and preparation for plastic surgery examination, and to deliver lectures to improve learning experiences of medical residents in the U.K. (Mayorga et al., 2014; N. M. Patel et al., 2020; Reissis et al., 2020). Furthermore, the use of webinar as the marketing and sales tool in internet marketing can manifest in knowledge sharing and demonstrations, further stimulate interactivity, personalization, and engagement with customers (Voskamp, 2012), as well as a useful educational tool to address management and industry issues related to equestrian practice (Pulec et al., 2016). Despite the abundant use of webinars in teaching, empirical research examining webinars in training contexts, human resource development, and adult education remains scarce (Gegenfurtner et al., 2020).

Triangulation

There are many unfamiliar consumers of digital banking services in Malaysia. New innovations are often rejected or resisted as users are not aware of the potential benefits or risks (Kleijnen et al., 2009). It requires more research and discussion in view that digital bank services' development is still at the infancy stage. The purpose of using a webinar as a data collection tool is based on the use of the triangulation method, where it is believed to be a credible and useful method of researching to improve both the quality and quantity of gathered data, enhances the validity and reliability of the research by overcoming potential bias, error vulnerability, and skepticisms resulting from the use of the single method or single source of data in a study (Begley, 1996). There are several types of triangulation, namely: 'Theory or Perspective Triangulation' such as the use of multiple perspectives to interpret data, 'Triangulation of Sources' which is the use of different sources within the same method, 'Methods Triangulation' that represents the use of different data collection method, and 'Analyst Triangulation' such as the use of further analysis to review data (Patton, 1990). Likewise, triangulation is advocated as a strategy to achieve a more comprehensive understanding of phenomena using multiple measures to capture the study's construct (Lambert & Loiselle, 2008). By using the triangulation method, we can understand the perception on the consumer's behavior intention towards the adoption of digital banking services from the group of experts such as bankers, fintech entrants, and monetary policy bankers where their opinions have been actively discussed through non-academic researches including news articles, experts' interviews, and webinars.

Observation data

Qualitative research can contribute to the reliability of findings and enriches data to conceptualize the phenomenon (Lambert & Loiselle, 2008). Additionally, qualitative data can also be collected in verbally or written texts and visual images associated primarily with research strategies such as case studies, grounded theory, ethnography and phenomenology, and research methods such as interviews, documents, and observation (Denscombe, 2010). Qualitative data can also be obtained through observation, which is defined as 'the systematic description of events, behaviors, and artifacts in the social setting chosen for the study.' We proposed that webinar can be a platform to collect observation data that include the fieldwork descriptions of activities, behaviors, actions, conversations, interpersonal interactions, organizational or community processes, or any other aspect of observable human experience (Marshall & Rossman, 2015). In a previous study, a blended approach of participant observation and video recording was used to enhance the validity of the researcher's interpretation of in-person words (Paterson et al., 2003). It is remarked that observation data derived from the qualitative method can contribute to the reliability of findings and enriches data to conceptualize the phenomenon (Lambert & Loiselle, 2008). Therefore, this study has selected suitable webinars as the platform

for observation data collection to increase the depth of data and allow us to generate more research data for Digital Banking Study.

Methods

Study design

This qualitative study was conducted as part of the Digital Banking Study to investigate the factors influencing the behavioral intention to adopt digital banking services among Malaysians. Interpretivist research philosophy was used throughout this paper to examine the potentials, advantages, and disadvantages of using webinars as a new source of the data collection method. Using interpretivism, we can conduct an in-depth investigation and qualitative research through webinars using a small sample size (Saunders et al., 2012). The study design is based on ethnography to study behaviors, perceptions, and social interactions that occur within a specific group, namely the expert in digital bank and finance (Reeves et al., 2008).

Sampling and data collection

The target sample population of this study is the experts who have experience in digital banking, technology, and finance. Purposive sampling method was adopted as this allows us to achieve an in-depth understanding of digital banking services and generate new knowledge through the processes of comparison and contrast with quantitative results (Palinkas et al., 2015; Patton, 2002). The selection of webinars was first started by identifying and selecting suitable webinar keywords on the internet: Malaysia, virtual bank, digital bank, fintech, challenges, and opportunities. The consistency of quantitative data collection was ensured by selecting webinars conducted from April to June 2020 that discuss the trend, opportunity, and challenges faced by Malaysian fintech players, banks, or start-ups in competing for Malaysia's first digital bank license. The appropriate selection was made by comparing to Digital Banking Study's research theme to ensure that the topics discussed will be relevant to conclude the factors influencing the adoption of digital banking services in Malaysia. A total of three webinars involving fintech players, journalists, and economists in the field of digital banking were selected as the observation points for this research purpose. Throughout the study, the experience during webinar data as appropriate research data was identified in a detailed journal.

Setting and procedure

The essential tools and documents for the recording and observations obtained from the webinar were identified following a suitable selection of related webinar sessions. To ensure the smooth and uninterrupted process of observing the selected webinar sessions, we also rectified relevant technical issues pertaining to computer and internet settings before webinar sessions. Relevant technical matters include the stability of the internet, functioning audio and speaker, and the video and audio recorder's effectiveness. The information obtained from the webinar sessions were then captured and recorded in an observation log prepared to document these experiences. Additionally, these webinars were recorded in two recording modes: video recordings that capture the speech and presentation explicitly and text recordings as typed by the researcher simultaneously throughout webinar sessions. The webinar session recordings were then replayed repeatedly to review the session details.

Analysis

The observation log and video recordings were analyzed to generate pattern codes, and the frequency of the words was identified using the Wordcloud software (Zygomatic, The Netherlands). The scripts placed from the webinars were recategorized into different topics based on the conceptual framework proposed in the Digital Banking Study, as shown in Figure 1. To enable us to identify the results' validity, we compared the webinar findings against the main findings collected from previously published quantitative results (Tiong, 2020). TAM and IDT theories were used as the point of reference for comparing the webinar's observation data against

56

summary of the findings is shown in Table 2 and Table 3 for TAM and IDT constructs. It is shown that a high consistency was observed from the selected webinars, therefore, proving the evidence that observation data from webinar sources can be used to validate quantitative results according to the research objectives of the Digital Banking Study.

Table 2 - Comparison of Qualitative and Quantitative Findings Based on TAM Constructs

Construct	Qualitative findings based on expert opinion	Quantitative findings based on user perception
Perceived ease of use	Experts believed that users would prefer products that offer: <ul style="list-style-type: none"> • simplicity, • easily accessible, • quickly learn the process, and • functionally comfortable banking journey. 	Users perceived that digital banking service must be: <ul style="list-style-type: none"> • easy to use, • easy to have the equipment to use, • easy to learn how to operate, and • not require much mental effort.
Perceived usefulness	Experts expressed that a useful digital bank service is: <ul style="list-style-type: none"> • able to serve different market segments, with various kinds of products, • improve users' financial knowledge and recommend better banking products according to the user profile. 	Users perceived that digital banking service must be useful in terms of: <ul style="list-style-type: none"> • accessible anywhere and convenient to use, • the use will increase user productivity, • the use allows users to enjoy more savings or investment returns than other means of banking.
Perceived social influence	Experts expressed that social influence could convince one's intention to adopt digital banking services through: <ul style="list-style-type: none"> • peer pressure when the product is excellent, and • the younger generation is likely to be influenced psychologically or follow older generation suits that generally served as role models. 	Users agreed that social influence plays in the part of influencing their intention to adopt digital banking services, mainly from: <ul style="list-style-type: none"> • people who control their behavior, • people who are important to them, and • the self-belief that many people will use digital banking services.

Table 3 - Comparison of Qualitative and Quantitative Findings Based on IDT Constructs

Construct	Qualitative findings based on expert opinion	Quantitative findings based on user perception
Compatibility	Experts believed that it is essential for a digital banking service provider to design a product that is compatible with users by: <ul style="list-style-type: none"> • knowing what consumer want through understanding, and • linking their lifestyle to banking needs. 	Users believed that compatibility influences their intention to use digital banking services when: <ul style="list-style-type: none"> • the service fits their lifestyle and needs, and • the service will be compatible with their banking needs
Trialability	Experts agreed that education and training are vital to help people to understand and adopt digital bank.	Users perceived that they could be convinced to use digital banking services to run the trial version.
Observability	Experts commented that the COVID-19 pandemic that led to the whole country's lockdown had accelerated Malaysian openness	Users agreed that they would adopt digital banking services if they able to observe: <ul style="list-style-type: none"> • the benefits of their users quickly, and

to digital banking innovation. They observed the benefits of fintech products, including digital bank service.

- how they are being used.

Based on our real experiences, we studied the credibility and validity of the qualitative data collected from the webinar by comparing the results with quantitative data of the Digital Banking Study's empirical analysis. The result shows that qualitative data from webinars based on experts' opinions is relevant to similar constructs in the prediction of factors influencing users' behavioral intention to adopt digital banking services, thus adding more research verification discussion rooms. Nonetheless, this paper's focus also needs to highlight our real experience of using a webinar as the new qualitative method to collect useful data. Therefore, both the advantages and disadvantages of the process are evaluated when assessing the webinar's effectiveness as a source of data collection. The advantages and disadvantages of webinar use as a source of qualitative data were summarized in Table 4.

A diverse, rich, and concise data can be obtained as the researchers are granted access to presenters from various professional groups' keynotes and insights despite being conducted remotely. The convenience of remote webinars posed as an advantage for the researchers. The effects of globalization, particularly with the growth of information society and advancement of society's development, conducting physical seminars may phase out with the rising trend of webinars in remote communication, working and convenient access with its costs, time, logistics and resource efficient advantages. Moreover, recorded webinar data also allows researchers to facilitate data verification easily.

Table 4 - Advantages and disadvantages of using a webinar as a source of data collection

Advantages	Disadvantages
Convenient <ul style="list-style-type: none"> • Not location bound. • Able to refer to the recorded webinar for verification. • Others organize no extra effort in coordination as a webinar. 	Sample bias <ul style="list-style-type: none"> • Presenters' views may not be relevant to the research topic. • Presenters' background is mainly successful and affluent, may not represent the vast opinion of most people.
Cost-Efficient <ul style="list-style-type: none"> • No setup fees are required. • No travel cost is required. • No additional cost to invite experts for opinions. 	Potential technology failure that affects data quality <ul style="list-style-type: none"> • Computer failure/faulty. • Poor internet connectivity. • The potential loss of silence from presenters due to technical issues.
Time Efficient <ul style="list-style-type: none"> • No travel is required. • Less time required to collect data as compared to self-arrangement setup interview or observation scene. 	Lack of control <ul style="list-style-type: none"> • Not all webinars will fit the research theme. • More time and effort may be required to dissect the captured data based on their research theme.
Sample diversity <ul style="list-style-type: none"> • Expands into regional locations for research. • Facilitates inclusions of a broader range of groups for opinions or participation. 	Lack of comprehensive data <ul style="list-style-type: none"> • The presenters' facial expressions may not be captured, especially when presenters' videos are not available. • Questions asked during the Q&A session may not be answered.

A list of practical recommendations for future users of this data collection method is presented in Table 5. These recommendations are derived from first-time experience employing webinars as a qualitative data collection tool. Webinars can contribute to additional data to enrich the research finding; thus, it is crucial to identify essential keywords in the selection of practical webinar sessions relevant to the research objective as the screening and selection process to determine the ideal webinar can be time-consuming. Nonetheless, it is also recommended to select at least three webinar sessions with diverse presenters' backgrounds to further enhance data collection. However, the chosen webinar sessions must not be held concurrently and should be held at a reasonable gap of time to enable researcher sufficient time for essential preparation and participation. The use of video recorder software is an added advantage for the researcher to playback webinar session recordings as reference and data verification.

Table 5 - Recommendations to elicit quality data from the webinar

Item	Recommendations
Selection	Identify the keywords that meet the research objective for the easy selection of suitable webinar sessions.
Tools	Use of video recorder software to record the webinar session for data verification.
Organization	Organize the webinar data onto Microsoft word according to the presenter's background or research theme.
Analysis	Make use of Wordcloud software to identify the words that appear most frequently and analyze the data according to the research objective or theme.

Discussion

Although conducting a quality face-to-face interview and participant observation is extensively discussed in the literature (Fritz & Vandermause, 2018), however, there is insufficient reports or research on webinar use for qualitative data collection. The employment of webinars is a relatively new data collection method; thus, it is necessary to discuss the advantages and disadvantages of conducting a useful webinar data collection.

This paper is the first in the academic industry to discuss webinars' potential use as a new tool of qualitative data collection that would contribute a unique perspective and knowledge on the type of research tool used to collect an in-depth data. The qualitative data collected for the Digital Banking Study also contributes to the new experience that will be beneficial to the business and management field, especially in the finance industry such as banks and fintech, consumers, policymakers. The findings of this study will also be beneficial to future researchers in understanding the factors influencing the adoption of digital banking services. This study has also shown that webinar-based qualitative data analysis of Digital Banking Study's theories could manifest consumer perception from a socio-psychological perception in the innovation and its adoption in today's digital transformation era based on the observation obtained from expert's opinion. Based on the extracted scripts according to the experts, the observation log identified the importance of factors such as ease of use, usefulness, social influence, compatibility, trialability, security, and privacy data management that will determine the success of digital bank in Malaysia and help to penetrate market across different types of users, generations and geographical locations. This is consistent with the quantitative results which further convinced the researchers that the conceptual framework from the theoretical perspectives of both TAM and IDT could explain potential user's behavioral intention in the adoption of digital banking services (Tiong, 2020). Furthermore, the employment of triangulation method, particularly data collection from webinars as a source of the qualitative approach, has further enhanced the research data which was intended to be answered by the Digital Banking Study. Most importantly, the webinar's use has undoubtedly created an opportunity for researchers to conduct study amidst the travel restriction imposed during the pandemic of COVID-19.

Data collection plays a significant role in any type of research study; thus, data collection method is particularly important as this impact the results of the study. Therefore, it is imperative that researchers control data collection method to obtain accurate data for analysis and generate significant research findings. We proposed that the mass data and scripts obtained from the webinar sessions can be easily analyzed by using Wordcloud software to identify the most repeated words. The categorization of data is followed according to research objectives or the presenter's background. For instance, in this study, we have referred to the conceptual framework proposed in the Digital Banking Study. According to TAM and IDT constructs, the organization of data allowed us to compare the conceptual framework, followed by a comparison with an existing literature review to explore and generate new findings.

Nonetheless, the use of webinar data can be limited by sample bias and potential technology failure. Additionally, the views may not be relevant to the researcher's research objectives or represent common opinion despite a diverse perspective of presenters to enrich the data. The researchers' lack of control also means more time and effort will be needed to find relevant webinars or segregate the contents suited to the research objective. Moreover, lack of comprehensive data can occur due to potential technology failure during live webinar sessions. Additionally, as aforementioned, the observation technique particularly one's facial expression is essential in qualitative data observation, likewise a lack of facial expression from the session can affect the results of the study.

Although this study has shown the advantages, disadvantages, and limitations of using a webinar as a qualitative method, many gray areas are worth exploring in future studies. A larger sample size, more empirical analysis, or experience from different research fields can contribute more convincing data on webinars' potential use as an effective qualitative research method. Moreover, the current study does not discuss researchers' experience of coordinating or moderating webinar sessions. It is purely researchers' observatory experience on webinars coordinated by others; thus, these experiences may not be accurate or relevant for future researchers who wish to host or moderate webinar sessions for data collection purposes. Nonetheless, this study's discussions open an opportunity to assess webinars' potential use in qualitative research. The findings of this study can be considered for future exploration of webinars' adoption as a new tool for data collection among academics, researchers, and the public.

Conclusion

This paper has established several conclusive discussions on the potential use of webinars, which may lead to improved data quality and provide useful tips and guides for future researchers in the employment of webinars as a qualitative data collection tool. This study's practical implication has shown that webinar is a useful data collection tool in the absence of face-to-face and physical participant observation. Moreover, it is also an alternative of data sourcing method that enables a wider scope of research sampling and area and access to experts' opinion and collaboration via high-speed internet connectivity. As globalization continues, so does the rapid development of technology, which drives the abundance and confident use of digital tools for education (Amhag et al., 2019; Greener & Wakefield, 2015). Therefore, the rising use of webinars and video conferencing software, especially in the current pandemic situation, has opened new opportunities for researchers to explore new data collection methods despite the challenges and limitations of social distancing and physical movement.

Funding: This research received no external funding.

Acknowledgments: The authors would like to express their sincere gratitude to research participants as well as the guidance from Mr. Haritharan Devanthran from SEGi College Sarawak, Kuching, Malaysia.

Conflicts of Interest: The authors declare no conflict of interest.

References

- Al-Jabri, brahim M., & Sohail, M. S. (2012). Mobile banking adoption: Application of diffusion of innovation theory. *Journal of Electronic Commerce Research*, 13(4), 379–391.
- Amhag, L., Hellström, L., & Stigmar, M. (2019). Teacher Educators' Use of Digital Tools and Needs for Digital Competence in Higher Education. *Journal of Digital Learning in Teacher Education*, 35(4), 203–220. <https://doi.org/10.1080/21532974.2019.1646169>
- Anderson, L., Fyvie, B., Koritko, B., McCarthy, K., Paz, S. M., Rizzuto, M., Tremblay, R., & Sawyers, U. (2006). Technical evaluation report 54. Best practices in synchronous conferencing moderation. *International Review of Research in Open and Distance Learning*, 7(1), 93–98. <https://doi.org/10.19173/irrodl.v7i1.308>
- Begley, C. M. (1996). Triangulation of communication skills in qualitative research instruments. *Journal of Advanced Nursing*, 24(4), 688–693. <https://doi.org/10.1046/j.1365-2648.1996.02446.x>
- Carnevale, J. B., & Hatak, I. (2020). Employee adjustment and well-being in the era of COVID-19: Implications for human resource management. *Journal of Business Research*, 116, 183–187. <https://doi.org/10.1016/j.jbusres.2020.05.037>
- Dahlberg, T., Mallat, N., & Öörni, A. (2003). Trust enhanced technology acceptance model - consumer acceptance of mobile payment solutions. *Stockholm Mobility Roundtable, January 2003*, 22–23.
- Dash, M., Bhusan, P. B., & Samal, S. (2014). Determinants of Customers' Adoption of Mobile Banking: An Empirical Study by Integrating Diffusion of Innovation with Attitude. *Journal of Internet Banking and Commerce*, 19(3).
- Davis, F. D. A. (1986). *Technology Acceptance Model for Empirically Testing New End-User Information Systems: Theory and Results* (Doctoral dissertation, Massachusetts Institute of Technology).
- Denscombe, M. (2010). *The Good Research Guide: For Small-scale Social Research Projects*. McGraw-Hill Education (UK).
- Donthu, N., & Gustafsson, A. (2020). Effects of COVID-19 on business and research. *Journal of Business Research*, 117, 284–289. <https://doi.org/10.1016/j.jbusres.2020.06.008>
- Fritz, R. L., & Vandermause, R. (2018). Data Collection via In-Depth Email Interviewing: Lessons From the Field. *Qualitative Health Research*, 28(10), 1640–1649. <https://doi.org/10.1177/1049732316689067>
- Gefen, D., Karahanna, E., & Straub, D. W. (2003). *Trust and TAM in online shopping: An integrated model* (Vol. 27, Issue 1). <https://doi.org/https://doi.org/10.2307/30036519>
- Gegenfurtner, A., & Ebner, C. (2019). Webinars in higher education and professional training: A meta-analysis and systematic review of randomized controlled trials. *Educational Research Review*, 28. <https://doi.org/10.1016/j.edurev.2019.100293>
- Gegenfurtner, A., Zitt, A., & Ebner, C. (2020). Evaluating webinar-based training: a mixed methods study of trainee reactions toward digital web conferencing. *International Journal of Training and Development*, 24(1). <https://doi.org/10.1111/ijtd.12167>
- Giovanis, A. N., Binioris, S., & Polychronopoulos, G. (2012). An extension of TAM model with IDT and security/privacy risk in the adoption of internet banking services in Greece. *EuroMed Journal of Business*, 7(1), 24–53. <https://doi.org/10.1108/14502191211225365>
- Greener, S. L. , & Wakefield, C. (2015). Developing confidence in the use of digital tools in teaching. *Electronic Journal of E-Learning*, 13(4), 260–267.



- Jiang, G., & Deng, W. (2011). An empirical analysis of factors influencing the adoption of Mobile Instant Messaging in China. *International Journal of Mobile Communications*, 9(6), 563–583.
<https://doi.org/10.1504/IJMC.2011.042777>
- Kapasia, N., Paul, P., Roy, A., Saha, J., Zaveri, A., Mallick, R., Barman, B., Das, P., & Chouhan, P. (2020). Impact of lockdown on learning status of undergraduate and postgraduate students during COVID-19 pandemic in West Bengal, India. *Children and Youth Services Review*, 116.
<https://doi.org/10.1016/j.childyouth.2020.105194>
- Kerr, E. B., & Hiltz, S. R. (1982). *Computer-Mediated Communication Systems: Status and Evaluation*. Academic Press.
- Kleijnen, M., Lee, N., & Wetzels, M. (2009). An exploration of consumer resistance to innovation and its antecedents. *Journal of Economic Psychology*, 30(3), 344–357. <https://doi.org/10.1016/j.joep.2009.02.004>
- Lambert, S. D., & Loiselle, C. G. (2008). Combining individual interviews and focus groups to enhance data richness. *Journal of Advanced Nursing*, 62(2). <https://doi.org/10.1111/j.1365-2648.2007.04559.x>
- Marangunić, N., & Granić, A. (2015). Technology acceptance model: a literature review from 1986 to 2013. *Universal Access in the Information Society*, 14(1). <https://doi.org/10.1007/s10209-014-0348-1>
- Marshall, C., & Rossman, G. B. (2015). *Designing Qualitative Research* | (6th ed.). SAGE Publications Inc.
- Mayorga, E. P., Bekerman, J. G., & Palis, A. G. (2014). Webinar software: A tool for developing more effective lectures (online or in-person). *Middle East African Journal of Ophthalmology*, 21(2), 123–127.
<https://doi.org/10.4103/0974-9233.129756>
- Nor, K. M., & Pearson, J. M. (2008). An Exploratory Study Into The Adoption of Internet Banking in a Developing Country: Malaysia. *Journal of Internet Commerce*, 7(1).
<https://doi.org/10.1080/15332860802004162>
- Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful Sampling for Qualitative Data Collection and Analysis in Mixed Method Implementation Research. *Administration and Policy in Mental Health and Mental Health Services Research*, 42(5).
<https://doi.org/10.1007/s10488-013-0528-y>
- Papadopoulos, T., Baltas, K. N., & Balta, M. E. (2020). The use of digital technologies by small and medium enterprises during COVID-19: Implications for theory and practice. *International Journal of Information Management*, June, 102192. <https://doi.org/10.1016/j.jinforamt.2020.102192>
- Patel, K. J., & Patel, H. J. (2018). Adoption of internet banking services in Gujarat. *International Journal of Bank Marketing*, 36(1). <https://doi.org/10.1108/IJBM-08-2016-0104>
- Patel, N. M., Khajuria, A., & Khajuria, A. (2020). Utility of a webinar to educate trainees on UK core surgical training (CST) selection – A cross sectional study and future implications amidst the COVID-19 pandemic. *Annals of Medicine and Surgery*, 59(September), 35–40.
<https://doi.org/10.1016/j.amsu.2020.08.054>
- Paterson, B. L., Bottorff, J. L., & Hewat, R. (2003). *Blending Observational Methods : Possibilities , Strategies , and Challenges*. 29–38. <https://doi.org/10.1177/160940690300200103>
- Patton, M. Q. (1990). Enhancing the Quality and Credibility of Qualitative Analysis. *Health Services Research*, 34(5 Pt 2), 1189–1208.
- Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed.). Sage Publications.
- Pavlou, P. A. (2003). Consumer acceptance of electronic commerce: Integrating trust and risk with the technology acceptance model. *International Journal of Electronic Commerce*, 7(3), 101–134.
<https://doi.org/10.1080/10864415.2003.11044275>

- Prime Minister's Office of Malaysia. (2020, March 16). *The Prime Minister's Special Message on COVID-19 – 16 March 2020*. Prime Minister's Office of Malaysia. <https://www.pmo.gov.my/2020/03/perutusan-khas-yab-perdana-menteri-mengenai-covid-19-16-mac-2020/>
- Pulec, K. E., Skelly, C. D., Brady, C. M., Greene, E. A., & Anderson, K. P. (2016). Effectiveness of webinars as educational tools to address horse industry issues. *Journal of Extension*, 54(3), undefined.
- Ramavhona, T. C., & Mokwena, S. (2016). Factors influencing Internet banking adoption in South African rural areas. *South African Journal of Information Management*, 18(2), 642. <https://doi.org/10.4102/sajim.v18i2.642>
- Reeves, S., Kuper, A., & Hodges, B. D. (2008). Qualitative research methodologies: ethnography. *BMJ*, 337(a1020). <https://doi.org/10.1136/bmj.a1020>
- Reissis, D., Joji, N., Campbell, E., Sharma, V. P., Staruch, R. M. T., & Baker, B. G. (2020). PLASTA National Webinar Series: A developing model for remote surgical education. In *Journal of Plastic, Reconstructive and Aesthetic Surgery* (Vol. 73, Issue 8, pp. 1575–1592). Churchill Livingstone. <https://doi.org/10.1016/j.bjps.2020.05.008>
- Rogers, E. M. (1995). *Diffusion of Innovations* (4th ed.). New York: Free Press.
- Romiszowski, A., & Mason, R. (1996). Computer-mediated communication. *Handbook of Research for Educational Communications and Technology*, 2, 397–431.
- Salavati, S. (2016). *Use of Digital Technologies in Education: The Complexity of Teachers' Everyday Practice* (Doctoral dissertation, Linnaeus University Press).
- Saunders, M., Lewis, P., & Thornhill, A. (2012). *Research Methods for Business Students* (6th ed.). Pearson Education Limited.
- Testers, L., Gegenfurtner, A., & Brand-Gruwel, S. (2015). Motivation to transfer learning to multiple contexts. *He School Library Rocks: Living It, Learning It, Loving It, June*, 473–487.
- Tiong, W. N. (2020). Factors Influencing Behavioural Intention towards Adoption of Digital Banking Services in Malaysia. *International Journal of Asian Social Science*, 10(8), 450–457. <https://doi.org/10.18488/journal.1.2020.108.450.457>
- Tong, X. (2010). A cross-national investigation of an extended technology acceptance model in the online shopping context. *International Journal of Retail & Distribution Management*, 38(10), 742–759. <https://doi.org/10.1108/09590551011076524>
- United Nations. (2020). Policy Brief: Education during COVID-19 and beyond. In *United Nations*. https://www.un.org/development/desa/dspd/wp-content/uploads/sites/22/2020/08/sg_policy_brief_covid-19_and_education_august_2020.pdf
- Venkatesh, V., & Bala, H. (2008). Technology Acceptance Model 3 and a Research Agenda on Interventions. *Decision Sciences*, 39(2). <https://doi.org/10.1111/j.1540-5915.2008.00192.x>
- Verma, A., & Singh, A. (2010). Webinar - Education through digital collaboration. *Journal of Emerging Technologies in Web Intelligence*, 2(2), 131–136. <https://doi.org/10.4304/jetwi.2.2.131-136>
- Voskamp, M. L. (2012). *Webinars as an effective marketing and sales tool in internet marketing* (Master's thesis, University of Twente).
- Wang, S. K., & Hsu, H. Y. (2008). Use of the webinar tool (elluminate) to support training: The effects of webinar-learning implementation from student-trainers' perspective. *Journal of Interactive Online Learning*, 7(3), 175–194.
- Webster, P. (2020). Virtual health care in the era of COVID-19. *The Lancet*, 395(10231), 1180–1181. [https://doi.org/10.1016/s0140-6736\(20\)30818-7](https://doi.org/10.1016/s0140-6736(20)30818-7)

- Wei, T. T., Marthandan, G., Chong, A. Y. L., Ooi, K. B., & Arumugam, S. (2009). What drives Malaysian m-commerce adoption? An empirical analysis. *Industrial Management and Data Systems*, 109(3), 370–388. <https://doi.org/10.1108/02635570910939399>
- World Health Organization. (2020, March 11). *WHO Director-General's opening remarks at the media briefing on COVID-19 - 11 March 2020*. World Health Organization. <https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020>
- Xiong, S. (2013, November). Adoption of mobile banking model based on perceived value and trust. *2013 6th International Conference on Information Management, Innovation Management and Industrial Engineering*. <https://doi.org/10.1109/ICIMI.2013.6703015>
- Yeh, H. (2020). Factors in the Ecosystem of Mobile payment affecting its use: From the customers' Perspective in Taiwan. *Journal of Theoretical and Applied Electronic Commerce Research*, 15(1), 13–29. <https://doi.org/10.4067/S0718-18762020000100103>
- Yu, Y. (2020, June 3). *Zoom's Q2 revenue jumps 169% as remote work trend continues*. Nikkei Asia. <https://asia.nikkei.com/Business/Technology/Zoom-s-Q2-revenue-jumps-169-as-remote-work-trend-continues>.
- Zhang, T. , L. C. , K. M. (2018). Banking “On-the-Go”: Examining Consumers’ Adoption of Mobile Banking Services. *Int. J. Qual. Serv. Sci.* , 10, 279–295. <https://doi.org/https://doi.org/10.1108/IJQSS-07-2017-0067>



SEISENSE
JOURNAL OF MANAGEMENT

Publish for FREE

SJOM is open access, peer-reviewed, and international journal. The SJOM is committed to publish scholarly empirical and theoretical research articles that have a high impact on the management.

Editorial Board

EDITOR IN CHIEF

Dr. Muhammad Azeem Qureshi - Oslo Business School, Oslo, Norway

Managing Editor

Dr. Nadeem Akhtar - Royal Commission at Yanbu, KSA

EDITORIAL BOARD

Dr. Tanveer Ahsan -Assistant Professor, Rennes School of Business, Rennes, France.

Dr. Saadat Saeed - Durham University Business School, London, United Kingdom

Dr. Dana Rad - Faculty of Educational Sciences, Arad, Romania

Dr. Lakhi Mohammad Khosa - CUST, Islamabad, Pakistan

Dr. Obed Rashdi Syed - University of Technology, Malaysia

Dr. Gülşen KIRPIK - Adiyaman University Kahta Vocational School, Turkey

Dr. Saeed Aas Khan Meo - Superior University Lahore, Pakistan

Dr. Zubair Ahmad - IMS, Bahauddin Zakariya University, Multan, Pakistan

Dr. Ba Phong Le - Hanoi University of Industry, Bac Tu Liem, Hanoi, Vietnam

Dr. Qamar uz Zaman - COMSATS University Islamabad, Sahiwal Campus, Pakistan

Dr. Mahadi Hassan Miraz - School of Technology Management Universiti Utara Malaysia

Dr. Shafique Ur Rehman - Department of Business Administration, ILMA University Karachi, Pakistan

FOR MORE INFORMATION VISIT
WWW.JOURNAL.SEISENSE.COM
JOM@JOURNAL.SEISENSE.COM

